

AGROSTAN

A Case Study for the 1970 World Census of Agriculture

UNIT V. DATA-COLLECTION PROCEDURES, PART A (ORGANIZATION, TRAINING, AND CONTROL)



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AGROSTAN: A Case Study for the
1970 World Census of Agriculture

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Chapter V-1. ORGANIZATION AND ADMINISTRATION OF THE FIELD OPERATIONS

1. INTRODUCTION

The success or failure of any census depends ultimately on the quality of the data collected; it is very important, therefore, that every effort be made to assure the highest quality possible. Careful and thorough planning in organizing the field operations coupled with rigorous administration of the plan will do much to achieve the desired level of quality. This chapter will discuss the organization and administration of the field operations with regard both to the basic principles involved and to the specific situation in Agrostan.

2. SUMMARY OF FIELD OPERATIONS

The field staff must carry out several preliminary activities in preparation for the actual data collection. During and after the data-collection process, other tasks must be performed in support of this central responsibility. Briefly, the field operations include the following major activities:

- (1) Compiling lists of National Certainty holdings (to be carried out by the Ministry of Agriculture).
- (2) Recruiting and training field supervisors, enumerators, and field office workers.
- (3) Spotting National Certainty holdings on the field maps.
- (4) Spotchecking boundaries of sample PSU's as shown on the enumerator's maps.
- (5) Subdividing large PSU's into two or more parts, with approximately equal population.
- (6) Listing each housing unit and agricultural holding in the sample PSU.
- (7) Selecting the sample of holdings in the sample PSU's (primary sampling units).
- (8) Filling the A-1 questionnaires for all National Certainty holdings and a sample of the holdings in the sample PSU's.
- (9) Measuring the area in cropland for a subsample of holdings (Northern Territory only).
- (10) Supervising the field staff, including observation and review of the field work.
- (11) Controlling materials, supplies, and completed work.

Each major category encompasses specific jobs which are assigned to specific individuals. These are discussed in more detail elsewhere.

3. COMPILING LISTS OF NATIONAL CERTAINTY HOLDINGS

Among the major field activities listed above, all will be under the administration of the NSO and its field staff except the task of compiling the lists of National Certainty holdings. In the Provinces, the District Agricultural Agents, who are employees of the Ministry of Agriculture, will become temporary employees of the NSO for purposes of assisting with the census. The agents will be asked to refer to various sources to compile a list of National Certainty holdings in their respective districts. The National Certainty holdings are those having 500 hectares or more or having certain specialized agricultural operations. The agents will be asked to compile the lists several months in advance of the census. These agents, rather than temporary employees recruited by the National Statistical Office (NSO) for the duration of the census, are being assigned to this task on the basis that the agents would be quite knowledgeable about large agricultural operations in their districts and would be available before the NSO field staff is fully recruited.

In the Northern Territory, the District Marshals would prepare a similar list under the general supervision of the Territorial representative for the Ministry of Agriculture.

The National Certainty Listing forms which the agents (and territorial marshals) are to fill

are shown as exhibits V-2-5 and V-2-7. Instructions for filling the forms are shown in exhibits V-2-8 and V-2-10. For the Provinces, the District Agricultural Agents are also given a list of large holdings as enumerated in the 1961 Sample Census of Agriculture (see exhibit V-2-9); holdings on this 1961 list are to be accounted for--either they will appear on the 1971 list, or they no longer exist as large holdings.

4. ORGANIZATION AND GENERAL RESPONSIBILITIES OF FIELD STAFF

Any statistical organization which uses personal interview as a method of collecting data requires a field staff. The functions of this staff fall roughly into three categories: (a) data collection, (b) supervision and quality control of data collection, and (c) administrative or clerical duties. The size of the field staff, the degree of specialization of the duties, and the relationship between the field staff and the NSO depend upon the nature of the project undertaken. For example, for a fairly small project the same persons might perform both the supervisory duties and the administrative duties and, perhaps, even assist in the actual data collection. If the project were one that involved repeated periodic data collection, the enumerators might be brought into the office to perform clerical duties during the interim between data-collection periods. Similarly, for a small project the field staff might operate directly out of the NSO. A larger project would probably require setting up several offices on a temporary basis at various points around the country; or, if the project were one extending over a long period of time involving repeated periodic data collection, it might require the establishment of several permanent field offices at points around the country.

The 1971 Sample Census of Agriculture in Agrostan is a large undertaking, but one that will be completed in a relatively short time; consequently, in order to maintain close control over the data-collection operation, 14 temporary field offices will be established. Each of the 13 Provinces will have an office to be known as the

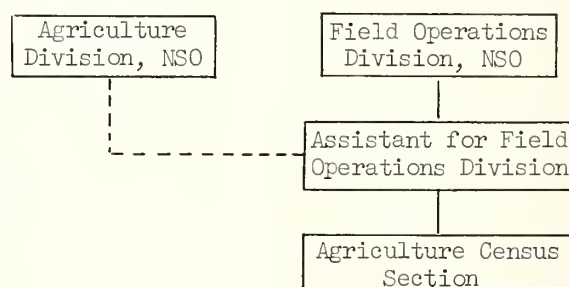
Province Census Office (PCO); the fourteenth office will be located in the Northern Territory and will be called the Territorial Census Office (TCO). The organization and responsibilities of the 13 PCO's will be identical; the organization and general responsibilities of the TCO will be similar to those of the PCO's but, because of differences in the enumeration plan for the Northern Territory, they will necessarily differ.

The discussion that follows will be concerned primarily with the 13 Provinces. Important differences in the Northern Territory will be discussed separately.

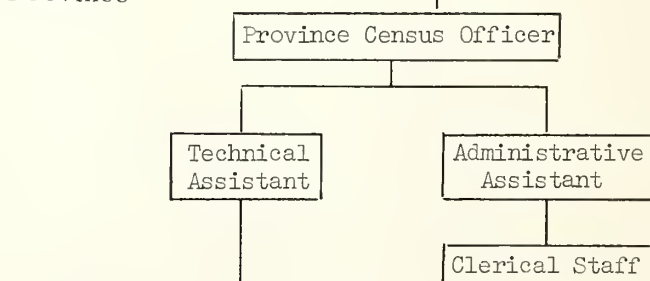
4.1 Organization

The diagram which is shown below illustrates the organizational structure of the Province Census Office and its relationship with the National Statistical Office. As the diagram shows, the

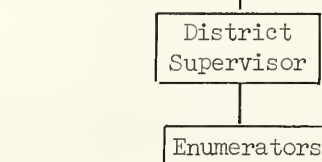
National



Province



District



PCO will be directly answerable to the Agriculture Census Section of the Field Operations Division of the NSO. All communication between the PCO and the NSO will be through the Agriculture Census Section. Personnel of this subsection will be responsible for establishing the PCO's. The PCO will receive supplies and instructions directly from the Agriculture Census Section and, in turn, will send in completed work, request additional supplies, and refer all problems to the Agriculture Census Section.

The PCO will be headed by a province census officer. Directly under him will be a technical assistant who will be primarily responsible for the collection of the data in the province, and an administrative assistant who will be primarily responsible for the clerical operations of the PCO. The district supervisors will serve under the technical assistant, and the enumerators under their respective district supervisors. The office clerical staff will be directly responsible to the administrative assistant.

4.2 General responsibilities

The responsibilities of the PCO will be discussed at greater length for each staff position separately and in the discussion of the enumeration procedures. In addition, detailed manuals have been prepared for the enumerators, the district supervisors, and the PCO staff; these are presented in Unit V, Part B of the case study (exhibits V-3-1, V-3-2, V-4-1, V-4-2, V-5-1, and V-5-2, respectively). The basic responsibility of the PCO is, of course, to carry out the data collection in the province but it also has numerous other tasks related to this central responsibility that must be performed before, during, and after the data-collection operation. These tasks are described below.

4.21 Staffing and recruiting.--The province census officer and his technical and administrative assistants will be appointed by the NSO. If possible, these people will be recruited on a temporary basis from the local offices of other branches of the national government. The two

assistants will be responsible for acquiring the supervisors and office personnel. The supervisors, in turn, will be responsible for acquiring their enumerators. Inquiry will be made of local officials, teachers, politicians, and the like for names of persons who might be interested in filling these positions. In addition, recruitment announcements will be posted as necessary. Persons who worked in the 1970 Census of Population should be considered prime candidates for similar positions in the Agriculture Census.

Exhibit V-1-1 illustrates a recruitment announcement and notice of training that the supervisor may use in hiring his enumerators as well as the identification card which will be issued to all persons who will be in direct contact with the public. Exhibit V-1-2 shows the application and personnel form which will be completed for all field personnel except the province census officer and his two assistants.

4.22 Training.--Formal training sessions must be held for the province census officer and his technical and administrative assistants, as well as for district supervisors and for enumerators. For the most part, office clerical staff will be given on-the-job training.

4.23 Scheduling.--Tentative schedules must be established for recruiting, training, completion of the field work, pickup and delivery of supplies and completed forms, and periodic meetings between enumerators and their supervisors. A time schedule for the major field activities is presented as exhibit V-1-5; an overall calendar, exhibit II-2-1, is also included in this unit.

4.24 Publicity.--A publicity campaign will be conducted in the sample PSU's to alert people to the coming Census and enlist their cooperation.

4.25 Preliminary field work.--The holdings on the National Certainty Listing Form must be spotted on the district maps so that the enumerators can find them. The boundaries of the sample PSU's should be reviewed in order to detect, in advance, problems that the enumerator will not be able to resolve without assistance.

4.26 Quality control.--Close contact must be maintained between the enumerators and district supervisors and between the district supervisors and the PCO during the data-collection operation so as to maintain a high level of quality. Failure to understand and follow directions must be detected and corrected quickly. Completed work must be reviewed. Enumerators or supervisors failing to meet acceptable standards must be re-trained or replaced before they have seriously impaired the quality of the operation.

4.27 Administrative control.--If the work is to be done efficiently and on time, periodic progress reports must be made. If the schedule is not being met, the causes must be determined and corrective action taken. Adequate supplies of materials must be kept on hand in the PCO and must be delivered to those who need them in time to prevent delays. Records must be kept to assure that all individuals are properly credited and paid for the work they perform.

4.28 Liaison with the NSO.--The PCO must maintain contact with the NSO at all times, keeping the NSO informed on the progress of the work in the province and the need for additional supplies, sending in completed work promptly, and referring to the NSO any problems that cannot be resolved by the PCO alone.

5. RESPONSIBILITIES AND REQUIREMENTS OF INDIVIDUAL STAFF POSITIONS

5.1 Province census officer

The province census officer will be charged with the general supervision of all the activities of the PCO. He will coordinate the work of the technical and administrative assistants to assure that they and those under them work harmoniously together. He will set up the time schedule and see to it that the work is completed in accordance with this schedule and sent on to the NSO promptly. Problems that cannot be handled by the two assistants will be referred to him either to be resolved by him or to be referred in turn to the NSO. He will act as the link between the PCO and

the NSO and will make periodic progress reports to the NSO both while preparing for the field work and during the actual enumeration.

As the representative of the NSO in the province, he will be responsible for maintaining good public relations with the citizens. To this end, he will direct a publicity campaign in the sample PSU's prior to the start of enumeration to inform the people about the upcoming census, explaining what will be done and giving them sufficient background about the importance of the census so as to enlist their cooperation. Furthermore, should problems or disputes arise later, it will be his responsibility to resolve them.

The individual filling this position will have to be someone with considerable executive ability and someone adept at public relations. He will have to be well-informed about the agriculture in his province. In addition, he should have had considerable experience in data-collection operations so that he will have some idea of what to expect and how to handle problems.

The province census officer should be a local person. If possible, the NSO should arrange with the Ministry of Agriculture to temporarily transfer one of their local officials to the NSO for the duration of the census. In some cases, the NSO may have to appoint someone outside the government to the position. In any case, because of the importance of this position, considerable effort should be made to acquire the best qualified person possible.

5.2 Technical assistant

The technical assistant will be the person most directly in charge of the field work in his province. He should be a person with some personnel experience since one of his duties will be to recruit and hire the district supervisors. He will also have primary responsibility for training the district supervisors and assisting them in training their enumerators. During the enumeration period he will visit the supervisors in the field, at which time he will discuss their work

with them and assist them in resolving problems. He will be directly responsible for maintaining an acceptable standard of quality of supervision and, through the supervisors, for maintaining an acceptable standard of quality in the enumeration.

The technical assistant must be free to travel and should be thoroughly familiar with the agriculture in his province. He should be experienced in data-collection techniques. Previous experience as an enumerator or as a field supervisor of enumerators would be helpful since he would, then, be better prepared to anticipate and resolve the problems that will surely arise. Such experience would be valuable in making him a more effective trainer as well. If possible, the technical assistant should be a local person already holding a government position who can be transferred to the NSO temporarily. In view of the requirements of the position, someone from the Ministry of Agriculture would be most desirable.

5.3 Administrative assistant and clerical staff

The administrative assistant will be primarily concerned with the clerical operations of the province office. He will recruit the clerical staff, assign their duties to them, and give them such training as is necessary for them to perform their work well. He and his staff will be responsible for maintaining employment records and records of disbursement of funds. They will keep the NSO informed on the progress of the enumeration in the province. They will see to it that necessary supplies are kept on hand in sufficient quantity, requesting additional supplies from the NSO far enough in advance to avoid shortages. They will distribute these supplies to the field promptly and efficiently when requested. The office staff will receive the completed field work, review it (on a sample basis), and send it on to the NSO.

The administrative assistant should possess executive ability and experience. His usefulness would be enhanced if he were also familiar with

the local agriculture and with data-collection operations; such knowledge would enable him to assist the province officer and the technical assistant in the field operations should the need arise. Again, a local government official, possibly someone from the Ministry of Economy, who can be assigned temporarily to the PCO would be a desirable candidate for this position.

The clerical staff should include some persons who can type since numerous messages will have to be sent to the field workers and to the NSO. In addition, control forms, payroll forms, and the like, may be completed at least partially in type. Some of the clerical staff (those assigned to review completed field work) should have some agricultural background. Persons experienced in office routines would be desirable; however, such persons may not be available. In that event, the administrative assistant will have to be especially diligent in training and supervising his staff.

5.4 District supervisor

The district supervisor, as his title implies, will be responsible for the enumeration in one district. Before the enumeration starts, the district supervisor will tour his area to spot on his map of the district the location of each holding on the National Certainty Listing Form. At the same time, he will check the boundaries of the sample PSU's to be sure that the PSU maps are usable and to detect in advance problems that will require special instructions for the enumerator. If, during this investigation, he becomes aware of any large holdings¹ he will add these to the National Certainty Listing Form and assign them for enumeration. In addition, he will post notices soliciting applicants for positions as enumerators and will set up meeting places at several locations in the district. As an aid in the final selection, the supervisor will find it useful to administer a simple test to the applicants.

¹At this point, holdings of 1,000 hectares or more would be added to the National Certainty Listing and given the next highest A-1 number.

An example of such a test is illustrated by exhibit V-1-3. After interviewing and choosing his crew of enumerators, the district supervisor (or team of supervisors) will train them and make their assignments.

The district supervisor will visit each of his enumerators several times during the course of the field work at which time he will review the enumerator's completed work, observe his field performance, and assist him in resolving any problems that occur or, failing this, refer the problems to the technical assistant. He will retrain enumerators who are not doing acceptable work; if this does not solve the problem, he has the responsibility and the authority to replace them. After an enumerator has completed the listing operation for a PSU, the district supervisor will select the sample of holdings for which the enumerator must complete Agriculture Questionnaires. He will maintain contact with the PCO, submitting completed work promptly and making periodic progress reports.

Persons selected as district supervisors must have comprehensive knowledge of the agriculture of the region. It would be very desirable to find persons experienced in data-collection techniques, particularly persons with previous experience either as supervisors or as enumerators who would be aware of the sort of problems to be faced. As an alternative, junior staff members in either the NSO or the Ministry of Agriculture might be assigned to the field for this work thereby acquiring valuable experience which would be of great use to them when they return to their regular assignments. In any case, the persons selected must be willing and able to travel since they will be required to cover considerable distances and often be away from home overnight. It would also be necessary for the supervisor to have some means of transportation.

5.5 Enumerators

The enumerators have two major tasks to carry out. First, they must list all housing

units and agricultural holdings in their assigned PSU's and elicit some basic facts about each holding. Second, they must complete Agriculture Questionnaires for certain holdings as designated by their supervisors.

In performing these tasks, the enumerator must be able to read maps in order to determine the PSU boundaries accurately and in order to locate the holdings where questionnaires are to be taken. He must be able to read well aloud and to write legibly. Some ability at performing arithmetic computations is also necessary. An enumerator must be sufficiently intelligent to learn the rules and to understand some fairly complex concepts. Finally, since he is the person most directly in contact with the public, the enumerator must be a person of pleasing demeanor and one who can, with tact and diplomacy, persuade reluctant individuals to cooperate. Before he can do this, he must be convinced himself of the importance of the census and of his role in it.

It would be desirable if the qualifications for the position of enumerator could be as high as those for the position of district supervisor. Unfortunately, as a practical matter, such persons would already have or would be seeking permanent employment. Although some economy could be realized by hiring persons who live in or near the areas in which they are to work, it is far more important to hire the best possible persons for this very important work; consequently, the residence of the prospective enumerator should not be an overriding factor in selecting the crew. Enumerators should be willing to work evening hours and to be away from home overnight on occasion. Also, it will be necessary for them to provide their own transportation.

The possibility of using younger employees either of the NSO or of the Ministry of Agriculture should be investigated. These persons would presumably have a better understanding of the importance of the census than would the typical enumerator and, with adequate training and supervision, could bring a high level of competence to the enumeration phase of the data-collection

operation. At the same time, they would be gaining valuable experience of a practical nature.

6. TRAINING PROGRAMS

The training programs are, of course, of great importance. Effective training before beginning a project coupled with rigorous supervision during its implementation will go a long way toward assuring the success of the operation.

6.1 Province census officer

The 13 province census officers will be trained at the NSO office in Calicut. One week will be allocated to this training. The officers will be given an overall view of the nature and purpose of the census project so that they will understand the importance of the role they are to play in carrying it out. Part of their training time will, of course, be allocated to specific instructions for performing their executive duties.² In addition, time will be spent in learning the duties of those who will be working under them. Particular attention will be given to the field operations and the concepts underlying the enumeration plan.

6.2 Technical and administrative assistants

Joint training sessions will be held for the technical and administrative assistants. Five-day sessions have been scheduled. Training will be given at two sites. The trainees from the provinces of Rajpur, Bolivar, Paris, Rama, Dewar, and Lo-San-Tho will meet at Ancash. The trainees from the remaining provinces will meet at the NSO office in Calicut. The first 2 days will be allocated to giving an overall view of the project and instruction in the general responsibilities of the assistants. During the last 3 days, the technical and administrative assistants will be separated for specialized training in their specific responsibilities.³

²Refer to the Manual for the Province Office (exhibit V-5-1) and the Manual for the Territorial Office (exhibit V-5-2).

³See footnote 2.

6.3 Clerical staff

Since the administrative assistant will be present at all times to tell them what to do and to show them how to do it, no formal training sessions will be required for the clerical staff. For the most part, they will learn by doing. There will be numerous records to keep and supplies and materials to be received from and dispatched to both the field staff and the NSO. A province office manual has been prepared (see exhibit V-5-1 in Part B of Unit V), explaining the purpose of each form and when it is to be used, and giving the instructions for filling it. The manual also describes the various supplies and materials that will be arriving in the PCO and tells the clerk what disposition to make of them.

An exception to the foregoing is the training to be given to the clerks who will review the completed work sent in by the field staff. Since these clerks will have to be familiar with the field procedures and the field forms, they will be given the same training as the enumerators and, in fact, will receive this training with the enumerators. In addition to reviewing the completed field work, they will also serve as a pool of trained enumerators to be called upon if necessary. The Manual for the Province Office, Form A-70 (exhibit V-5-1), contains instructions for this review operation.

6.4 District supervisors

The district supervisors will be trained at the PCO by the technical assistant. If there are no more than 15 to be trained, they will be trained together; otherwise, they will be trained in two groups. Their initial training will cover only the operations to be performed before enumeration begins. A second training session on the data-collection operations will be given after the preliminary operations have been completed.

In the initial training session, the district supervisors will be given the necessary instruction to enable them to (a) inspect their districts in order to spot the locations of the National Certainty holdings, (b) check the boundaries of

the sample PSU's, (c) subdivide large PSU's for purposes of sampling,⁴ and (d) recruit and hire their enumerator crews. This will be a fairly short session of about 2 days' length.

At the second training session (for 5 days), the district supervisors will be given the same type of training that they will be giving their enumerators since they must be thoroughly familiar with the enumerator's duties if they are to do an effective job of supervision. In addition, they will be given special training in their own duties and responsibilities as supervisors (see exhibit V-4-3). The Field Supervisor's Manual is shown as exhibit V-4-1.

6.5 Enumerators

The training of enumerators will be given by the district supervisors with the assistance of the technical assistant (see exhibit V-3-3). District supervisors may hold a joint training session so long as the maximum number to be trained at the session does not exceed 20.

6.51 Classroom training.--The classroom training will study in detail everything presented in the Enumerator's Reference Manual (exhibit V-3-1). It is not expected that the enumerators will remember every detail in this manual. However, they should get a good idea of what they are expected to do, and they should become sufficiently familiar with the manual to be able to use it intelligently as a guide later. In order to assure that the training sessions are reasonably uniform and cover all the important topics, a training guide will be used by all instructors (see exhibit V-3-4 for a portion of this guide).

6.52 Practice interviewing.--Two types of practice enumeration will be carried out. In conjunction with the classroom training, a practice interview and a mock interview will be conducted (see exhibit V-3-4). After each section of the questionnaire has been studied, the enumerators will fill that section of the questionnaire on the basis of the responses given in the practice interview. At the end, they will fill an entire

questionnaire at one time on the basis of a prepared mock interview. After their classroom training has been completed, the enumerators will be given actual field experience both in listing and in completing questionnaires.

For the field interviewing, the enumerators will go out to predesignated areas in the vicinity of the training center (but not in sample PSU's). Generally, they will go in pairs and while one conducts the interview, the other will observe. In this way they will be able to point out each other's mistakes. They will practice the listing operation first. The supervisor will visit them at the training site at which time he will observe them and help them to improve their work. He will then designate two holdings for which they are to obtain questionnaires. On his next visit, the supervisor will go over the completed questionnaires and discuss their experiences with them. He will then accompany the enumerators as each one obtains another questionnaire.

This procedure will provide valuable training for the enumerators. Furthermore, it will enable the district supervisor to determine which enumerators are likely to have trouble later. He may elect to give these individuals additional attention before sending them out on their own, or he may simply decide to visit them first after the enumeration has begun. In extreme cases, he may decide to replace them before any harm is done.

After the practice interviewing, all the enumerators and the district supervisor should reassemble and discuss their experiences.

7. CONDUCTING THE FIELD WORK

Much of the responsibility for the success or failure of an operation such as a census of agriculture rests on the shoulders of those who actually collect the data. If these people fail to do good work, there is little that anyone higher up can do to salvage the project. The keys to high quality data collection are (a) a capable, well-trained staff of supervisors and enumerators dedicated to doing the best job possible, (b) a well-coordinated plan of operation,

⁴Exhibit II-3-4 is an example of a subdivided PSU.

and (c) an efficient organizational structure that will maintain effective communication all the way up and down the chain of command. Rigorous control must be maintained at all levels to be sure that the census is being carried out correctly and in accordance with the time schedule. For example, weaknesses must be detected and corrected quickly, supplies must be where they are needed when they are needed, and completed work must be reviewed at each level and sent to the next level promptly.

7.1 Workload

The average number of listings per district will be about 2,000 of which about 450 will be selected for enumeration.⁵ In addition, about 25 National Certainty holdings will require questionnaires. Although workloads will vary (see exhibits IV-2-6 and IV-2-7), the typical district will have 20 PSU's in the sample and require 5 enumerators to do the field work. The amount of work assigned to an enumerator depends on the supervisor's assessment of his ability. Generally, one supervisor will be responsible for one district; very large districts, in terms of workload or travel, may require two or more, whereas some small ones may be combined. The NSO will specify the number of sample PSU's in each district (see exhibit IV-3-7).

7.2 Making enumerator assignments

The district supervisor should tentatively make all of his assignments before the field work commences; however, the enumerator should not be given the entire assignment at this time. Because of the procedure to be followed, each enumerator will need to be assigned two PSU's so that he can continue working in the second one while waiting for the district supervisor to visit him and draw the sample in the first one. The remainder of the tentative assignment should be held by the district supervisor until after he has had a chance to assess each enumerator's ability, leaving him greater flexibility in altering his plans should it appear warranted.

The original assignment will be based primarily on the geographic distribution of the areas to be enumerated relative to the residences of the enumerators. The size of the assignments will be made as equal as possible. After the district supervisor has had a chance to observe all of his enumerators in action, he will probably want to alter his plans to give a larger assignment to those who are doing superior work or who are proceeding at a faster pace than the others. By withholding part of the material until this point, he will be able to change his plans with a minimum of difficulty since he can add to one enumerator's assignment without having to request another enumerator to turn back part of his.

The assignment of the holdings on the National Certainty Listing Form should be delayed until the enumerator has had some experience in enumerating the smaller holdings. Here, again, geography of the area and the enumerator's competence should be the factors influencing the supervisor's decision, with competence receiving the greater consideration.

The district supervisor will have a master list of PSU's to be assigned, "Field Supervisor's Master Control of PSU's, Form A-100" (exhibit V-2-14); a map of the district identifying the PSU's by number and showing their boundaries in wiggly lines (see exhibit II-3-6, which is included as a reference exhibit in this unit); and a National Certainty Listing Form A-2c (exhibit V-2-5) listing all the National Certainty holdings for this district. These will serve as his control forms.

The enumerator will receive a portfolio (refer to exhibit V-1-6) containing a Listing Book (Form A-2a) with appropriate identification items already entered and a detailed map of the sample PSU (see exhibit II-3-5). He will be given a map of the district (similar to the one given to his supervisor) to help him locate his PSU's and the National Certainty holdings. He will also receive a National Certainty Listing Form A-2c, filled by the supervisor, showing only the holdings assigned to him; he should spot the location of these National Certainty holdings on his copy of the map.

⁵The sample size is discussed in more detail in Chapter 2 of Unit IV.

7.3 General field procedure

The district supervisor should plan to accompany each enumerator on his first 2 or 3 days of work, visiting first those enumerators who appeared weakest during the training. Where possible, it would be desirable to stagger the starting dates.

The enumerator will complete the listing operation in one PSU before starting the next one. Sometime during the listing of the second PSU, the district supervisor will visit the enumerator to review his completed work and to observe him. At this time he will draw the sample from the first PSU and, if the enumerator is doing satisfactory work, assign him a third PSU to list. The enumerator will complete the listing of the second PSU and then return to the first PSU to complete the necessary questionnaires before starting to list the third PSU. This procedure will continue throughout. It serves two purposes:

- (1) It minimizes the time span between the training session and the first experience at completing questionnaires. It is necessary that the enumerator begin filling questionnaires as soon as possible while his training is still fresh in his mind.
- (2) It avoids the situation of having an enumerator do all of the relatively easy part of his assignment (the listing) and then either decide to quit and let someone else do the more difficult work or be found incapable of doing a satisfactory job of questionnaire filling and have to be replaced.

When and to whom to assign the holdings on the National Certainty Listing Form will be up to the district supervisor. Having received such an assignment, the enumerator should integrate it with his other work in such a way as to minimize travel.

The district supervisor will visit each of his enumerators several times during the field work at which time he will pick up and review his completed work, observe his performance, and possibly give him additional assignments. At each visit he will make appropriate entries on the observation and review forms A-121 and A-122 (see exhibits V-2-11 and V-2-12).

7.4 Listing

The listing operation is discussed in the Enumerator's Reference Manual, Form A-50 (see exhibit V-3-1 in Part B of Unit V of the case study). The enumerator will list every housing unit in his assigned PSU in the Listing Book (Form A-2a) and determine, among other things, whether or not anyone in the unit operates a holding and, if so, the size of holding. A sample of holdings for which questionnaires are to be completed will be drawn from these listings. It is anticipated that this operation will require about 4 days per PSU; this will vary, of course, depending on such factors as the size of the PSU, travel facilities, complexity of the agricultural practices in the area, and the ability of the enumerator.

7.5 Filling Agriculture Questionnaires

Questionnaires are to be obtained for those holdings designated by the district supervisor on Form A-2a and for all holdings assigned to the enumerator on Form A-2c, National Certainty Listing Form. Every effort must be made to obtain all of these questionnaires. Furthermore, the enumerator should try very hard to obtain the necessary information about each holding from the person best qualified to give it. In most cases, that person would be the holder.

The enumerator will have to be very persuasive and very diligent and on occasion even tenacious. He must be prepared to overcome objections by convincing the prospective respondent that the census is very important to the nation's welfare and that his cooperation is very important to the success of the census. He must allay any fears that giving the requested information may be harmful. The enumerator must be prepared to work long hours and, particularly, he must be prepared to work at odd hours such as in the evenings or even early in the mornings in order to find people at home.

Those who are adamant in refusing to cooperate should be reported to the district supervisor

who may elect to try to change the person's mind. If this fails, the matter should be turned over to the PCO for further action. These and similar problems would be recorded on a Problem Referral Form 101 (exhibit V-2-15).

7.6 Control of materials and completed work

The enumerator will receive his materials from and turn his completed work over to his district supervisor when they meet in the field. The supervisor will deliver the completed work and the requests for supplies together with his progress reports and payroll authorizations to the District Office of the Ministry of Economy where a truck from the PCO will make weekly stops for pick up and delivery. Clearly, the enumerators and district supervisors must plan well ahead in order to avoid delays because of shortages.

For each PSU assigned, the enumerator has been provided with an envelope containing the Form A-2a and the PSU map. These, together with all completed questionnaires taken in that PSU, should be placed inside the envelope and turned in at one time. Completed questionnaires for National Certainty holdings, however, should be turned in at the earliest opportunity lest some become misplaced before all are completed. Both the district supervisor and the control clerks in the PCO will keep records of materials turned in. The principal control forms used by the district supervisor are the Master Control of PSU's and the Record Book (exhibits V-2-14 and V-2-17); the principal one used by the PCO control clerks is the PCO Master Control of PSU's (exhibit V-2-20). Transmittal of materials will be accompanied by a Field Transmittal, Form 102 (exhibit V-2-16).

7.7 Payment of enumerators and supervisors

In general, enumerators will be paid by the job, the exception being the National Certainty holdings for which they will be paid on a piece-rate basis. A set fee will be paid for (a) completing the training, (b) listing a PSU, and (c) completing the necessary Agriculture Questionnaires in a PSU. It is believed that in most cases the

average workload over all PSU's in an enumerator's assignment will not differ greatly from the overall average. An allowance for travel will also be paid.

As each job is completed to the supervisor's satisfaction, he will prepare the necessary Pay Authorization, Form 105 (exhibit V-2-19) in triplicate--one copy to be given to the enumerator and later forwarded to the NSO, and the other two for the PCO and the District Office of the Ministry of Economy. The enumerator will receive payment when he submits his authorization to the District Office of the Ministry of Economy.

The supervisors will be paid a weekly salary plus travel allowance. Payment will be authorized by the appropriate official in the PCO. Form A-105 will be prepared in triplicate--the copies to be distributed in the same manner as those for the enumerators. The supervisor will receive payment at the District Office of the Ministry of Economy.

8. QUALITY CONTROL PROGRAM

A vigorous quality control program must be carried out if the data-collection operation is to meet acceptable standards. Effective training, careful observation, and thorough review of completed work will be important elements in this program.

8.1 Training

The initial training program has already been discussed in some detail. Additional individual remedial training will be given by the district supervisor when it appears to be necessary.

8.2 Observation

As has been discussed previously, the district supervisor will observe each enumerator in actual field interviewing situations. This is the only means whereby he can determine whether or not the enumerator is carrying out the procedure correctly. As he observes, the district supervisor will pay particular attention to the thoroughness with which the enumerator canvasses his area and the

manner in which the enumerator introduces himself and explains the census to the respondents as well as to the way he completes the Listing Form (A-2a) and Agriculture Questionnaire (A-1a). With regard to the two forms to be filled, the district supervisor will check particularly to see that the questions are asked as written and in the proper sequence and that the responses are recorded properly.

As he observes, the district supervisor will record his impressions on observation forms, Forms A-121 and A-122 (exhibits V-2-11 and V-2-12). These will serve as the basis for discussing with the enumerator his strengths and weaknesses. The supervisor will retain possession of these forms so that he can use them to refresh his memory before observing the enumerator the next time. They will also show whether or not the enumerator is improving his performance as the work continues. The supervisor will turn in the filled observation forms when the enumerator completes his entire assignment.

8.3 Review

Each time the district supervisor visits the enumerator, he will review the work completed since the last visit. On at least the first two visits, he should thoroughly review all the work. On subsequent visits, he can use his own judgment in determining whether a complete review is necessary or whether a review of a sample of the work will be sufficient. The supervisor should use the same two forms, A-121 and A-122, to record the results of his review.

9. DIFFERENCES IN THE NORTHERN TERRITORY

Because of differences in conditions, the field operations are organized and administered somewhat differently in the Northern Territory than in the provinces. Most of the differences are minor, however.

9.1 Organization

The organization is essentially the same in the Northern Territory as in the provinces except that the central office is called the Territorial Census Office (TCO), the chief executive is called the Territorial Census Officer, etc. The TCO occupies the same position in relation to the NSO as do the PCO's.

9.2 Responsibilities and requirements of individual staff positions

The requirements for the individual staff positions and the procedures employed for filling these positions in the Northern Territory are identical to the requirements and procedures in the provinces. There is, however, one important difference in responsibility. In the Northern Territory, the enumerator rather than the supervisor will select from the Listing Book the sample of holdings to be interviewed. In addition, he must select from those holdings to be interviewed a subsample for purposes of area measurement and, of course, carry out the measurements when he completes the questionnaires.

9.3 Training programs

The training programs in the Northern Territory will differ somewhat from those in the provinces. Since the enumeration in the Northern Territory is scheduled to begin in mid-November 1971 (in contrast to January 1972 in the Provinces), the administrative officers will have to be given individual training in their duties. This training will be given in Calicut at the NSO office. All of the training for the field supervisors will be given in one session. Because of the time and travel involved, it would not be practical to bring the supervisors into the office for a second time. Moreover, the amount of preliminary work is less and the scope of the questionnaire more limited than in the Provinces.

9.4 *Conducting the field work*

Although the questionnaires used in the Northern Territory are different from those used in the provinces, the field work will be conducted in much the same manner except for the measurement of area. As has already been mentioned, a subsample of holdings will be selected for area measurements. Detailed instructions for this operation are given in the Enumerator's Reference Manual (Northern Territory), Form A-51 (exhibit V-3-2). Area measurements will not be made for National Certainty holdings.

An estimated 100 PSU's will be selected in the sample (see exhibit IV-5-4). These are expected to yield approximately 10,000 listings, with about 1,600 holdings selected for interview; about 400

of these will be in the subsample for area measurement. In addition, about 105 large operations will be designated as National Certainty holdings. It is estimated that at least 8 or 9 supervisors and 35 to 40 enumerators are needed.

9.5 *Quality control*

The quality control program will be much the same in the Northern Territory as in the Provinces. Because of the distances involved and the difficulties of travel, the supervisors in the territory will probably not be able to maintain quite as close control over their enumerators as will the supervisors in the Provinces. Counterbalancing this somewhat is the fact that the questionnaires are simpler and easier to complete in the territory.

1. INTRODUCTION

An important step in any data-collection operation is the design and preparation of forms to be used in the field. The basic form to be considered is, of course, the questionnaire. Depending upon the demands of the project, listing forms or so-called "screening" forms may also need to be devised. Finally, various control forms for making assignments, recording progress, recording the results of review of the work, and the like, are needed.

In designing the forms to be used there are many considerations and alternatives that should be examined before any final decisions are reached. Some compromises will almost certainly have to be made in order to satisfy varying requirements. For example, a questionnaire design which would most facilitate office processing might not be the most effective vehicle for the collection of the data. Compromises also have to be made, particularly in connection with office-use forms, when deciding whether to have many simple forms or to have fewer forms with many items on each. As a general rule, compromises should be made in the direction of accuracy rather than convenience.

As part of the preparation process, forms should be pretested in actual practice situations. In the case of questionnaires or listing forms, this pretesting would eventually involve actually going into the field and doing some practice enumeration. Office-use forms can be pretested also by presenting the pretester with an artificial situation to be handled. To be effective, such situations should approximate as closely as possible conditions which will actually be encountered when the census is taken.

Most of the following discussion is of a general nature applicable to any data-collection operation. However, since the forms to be used in the Agrostan Sample Census of Agriculture have

been designed with these principles in mind, several of them will be referred to and presented as illustrative material.

2. PHYSICAL CONSIDERATIONS IN PREPARING FORMS

A variety of forms will be used in any agricultural census program. These include enumeration forms, field control forms, office control forms, and the like. Each form is designed to satisfy particular requirements.

2.1 Form identification

Each form should carry a date to distinguish it from other versions of the same form. It should also carry a unique form number and a letter prefix to indicate the project. For the Agrostan Census, the prefix "A" will be used on all forms, the "A" standing for "Agriculture." Another project would use a different letter (or group of letters).

Numbers should be assigned in series or blocks to enable one to identify them with specific functions. Questionnaires and other field forms used for recording data obtained in the field should generally be assigned the lower numbers, 1 to 49. For example, the questionnaire for the Agrostan Sample Census of Agriculture has been assigned number 1 and the listing form number 2. Variations of these basic forms are indicated by letter suffixes such as A-1a, A-1b, A-1c, and A-1d. Instructions and training materials are assigned numbers from 50 to 99, other field-use forms from 100 to 149, Province Census Office control forms from 150 to 199, etc.

2.2 Size

The size of a form is controlled primarily by the number of questions that are to be asked (or items to be filled), the size of the type, and the amount of space required to record the answers.

A form should be large enough to provide ample white space and to accommodate print that can be read under less than ideal lighting conditions. At the same time, the form should not be so large as to be unwieldy. If several forms are to be used in the same operation, it would be desirable to have a uniform size for ease in handling. For practical reasons, it is desirable to make the forms a size which would fit standard-size file folders and filing cabinets.

2.3 Color and quality of paper

The paper should be a color that is distinctive and easy on the eyes. When several forms are involved in one operation, different colors facilitate the selection of the appropriate form by the enumerator and reduce confusion when being used or filed in the office. Generally, the more conservative colors are reserved for forms which are used in large quantities or which are used in interviewing.

Quality of the paper should be given some consideration. For forms which require frequent handling or which will be exposed to the weather, heavy paper should be used if possible. On the other hand, for forms used only in the office or forms which must be prepared in duplicate or triplicate, lightweight paper is satisfactory.

2.4 Arrangement of items

A form should be laid out in a manner which will make it convenient to use. Consideration should be given to control items as well as data items. If a form is to be handled frequently and must be kept with other forms for the same enumeration or tabulation area, it would be desirable to place the identification items in the upper right corner. If the form is to be filed in a folder or filing cabinet, the filing and sorting may be facilitated by placing the control information so that it would appear upright in the folder; on the other hand, if the form is to be filed in a looseleaf binder, it would be more convenient to have the control information located along the right margin.

With regard to data items, the layout depends upon a number of factors. If a question requires that names of crops be listed, for example, the form may be designed to accommodate the average expected number of crops per holding. If there are many questions to be asked, both sides of the paper can be used and the questionnaire arranged in booklet form.

The questionnaire should be arranged so that related questions are conveniently grouped in a logical order. Enough space should be allowed between questions so that the enumerator can locate them readily during the enumeration, particularly if the questionnaire also includes numerous instructions. If information is to be edited, coded, and punched directly from the form, the arrangement and spacing of the items and the answer categories should take these operations into account without, at the same time, jeopardizing the convenient handling of the form by the enumerator.

2.5 Wording of questions and response categories

An important decision that must be made in designing a questionnaire is the manner in which each inquiry is to be written. That is, whether it is to be simply a heading to serve as a guide to the enumerator or whether it is to be a complete question which the enumerator is to read verbatim. For example, an item designed to elicit the amount of land rented from others might be worded simply as "Total hectares rented from others" or "How much land do you rent from others for cash or share of the crop or livestock production?" Similarly, inquiry into the method of payment may be worded as "Rental arrangement" or "What did you agree to pay as rent for the year?"

Questions which are to be used verbatim by the enumerator are generally considered preferable to a simple listing of the items. The verbatim questions achieve more uniformity and reduce the bias that results from enumerators interpreting and phrasing questions in light of their individual understanding and experiences. The use of

verbatim questions also permits the enumerator to proceed smoothly with the interview and relieves him of the burden of forming the questions, often in the midst of many distractions in the household.

The format in which the responses are to be recorded is also an important matter to be decided. Where the answer categories can be predetermined, they can be printed on the questionnaire, and each response recorded simply by checking the appropriate code box. In other cases, where the categories are numerous or would require specialized interpretation and coding, space may be provided for the enumerator to write in the answer. In still other cases, the arrangement of the responses may be a combination of the two. For example, if four categories cover all methods of operation of a holding, the four can be listed on the questionnaire and the enumerator need only check one of the boxes; on the other hand, under each family of crops, several specific crops can be listed and space provided at the end for the enumerator to write in, if necessary, any crops not itemized. In deciding the format in which responses are to be recorded, one must take into consideration the advantages and disadvantages of the alternatives. Having predetermined categories facilitates both the recording and the processing of the data but has the disadvantage of forcing the responses into a given set of categories. So-called "open end" questions, on the other hand, while allowing greater freedom of response, often present problems of interpretation and categorization which must be resolved before the data can be summarized in tabulations.

2.6 Uniformity in style

Whichever arrangement is used in the layout of the questionnaire, there should be some uniformity in style with respect to the placing of the code boxes, the kind of type used, the placement and use of instructional guides, and the like.

In general, questions which the enumerator is to ask should be in heavy type and statements he

is to read to the respondent should be in similar type. Instructions to the enumerator should be in lighter type or an entirely different kind of type. Check boxes are usually placed to the left of the printed category but, whether to the left or to the right, the arrangement should be consistent throughout the questionnaire.

In all cases, the enumerator should be required to proceed sequentially with the items on the questionnaire unless directed otherwise. Sometimes arrows may be used to indicate which box is to be checked or which question is to be asked next. In other instances, an instruction in parentheses would tell the enumerator when to skip a question.

Identification items should be in the same sequence on all forms insofar as possible and be as detailed as necessary to uniquely identify each form. For convenience in handling in the field, filing, and processing, the identification items are generally placed at the top of the form or in one of the margins.

3. PRETESTING OF FORMS

Prior to the start of the field work, the forms to be used should be tested. Otherwise, the census may fail to obtain the kinds of information it had hoped to measure. A pretest should include not only the forms to be used in the actual data collection (the questionnaire and any listing forms that may be required), but other forms such as control forms, report forms, and the like. Various methods of pretesting can be utilized. The particular method chosen will depend on several factors such as:

- (1) The time and money available. Some sophisticated pretesting procedures can be quite costly in terms of both time and money. If resources are already in short supply, simpler means may have to be used. However, one should not restrict the pretesting program without first carefully weighing all considerations; the possibility that some other aspect of the overall program might better be curtailed should always be investigated.
- (2) The seriousness of the consequences if the form is inadequate. Clearly, if the questionnaire should be found to be inadequate

after the start of the field work, the entire program would be greatly handicapped. It would usually be almost impossible to revise it at that stage; and, even if it were feasible to do so, such revisions would be very costly in terms of both time and money. On the other hand, an inadequate office form that is used very little or is used a great deal but by a limited number of people, might not be so serious. Special instructions could probably be issued to adapt the form to better fit the needs of the program; the form itself could probably be revised by hand, using a stamp or even using pen and ink.

- (3) The similarity of the form in question to other forms used for similar purposes in previous data-collection operations. Forms that are the same as, or quite similar to, forms used previously should not require much pretesting. The experience with the previous form should have been used to improve the present form so that, in a sense, the form has already been pretested thoroughly.

The following discussion will be concerned primarily with pretesting the questionnaire since it would ordinarily be the most important form to be tested. The general procedures cited are generally applicable to other forms as well.

3.1 Methods of pretesting questionnaires

In a sense, the first pretest of the questions occurs when the questionnaire is first being drafted. Whether drafted by a single individual or by a group of individuals, decisions have to be made regarding what sort of questions are to be included and how they are to be worded. These decisions will be based to a great extent on the experiences the drafters have had with previous questionnaires. Once a rough draft has been devised, other people will probably review it and criticize it on the basis of their experiences. The questionnaire will probably pass through several drafts before it is ready for an actual field trial.

Usually during a pretest, one will be testing the questionnaire format as well as the questions. That is, one will be testing the general layout of the questionnaire and the sequence of the questions as well as the wording. This does not necessarily require that the pretest document be printed in

final form complete with all the various kinds of type and codes, although this would be desirable for a large pretesting program.

Exhibits V-2-1 and V-2-2 illustrate an early draft and final format of selected portions of the basic Agrostan Agriculture Questionnaire (Form A-1a).

Although the early draft of example 1 appears simpler than the final format, it is not satisfactory. In the middle of the question, the enumerator is instructed to read the list of crops. If the respondent answers "yes" to any one of the cereals, presumably the enumerator is to mark the "yes" box. However, it is not clear when he should complete the question "harvested last year"? Also, it appears awkward to have the enumerator finish the list then go back to mark the "no" box when no cereals were harvested. The final format permits the enumerator to read each cereal, record a "yes" answer when appropriate, or mark "none" when he finishes the list. The use of the phrase "the following cereals" tells the respondent a list is to follow and keeps him from answering before the enumerator has an opportunity to remind him of specific cereals. The questions on area and production are such that the enumerator can read them verbatim, and the use of check boxes for the unit of production will facilitate recording the information as well as editing and tabulating it.

In example 2, question 84(a) requires the respondent to give a total figure for the land area in succession crops. The land area that would be duplicated in the crop area reported earlier in the questionnaire would be the difference between the amount in 84(a) and the total in 84(b). The final format permits an explanation of succession cropping and the convenient recording of each crop separately.

Example 3 illustrates questions that are unnecessarily wordy. The final format provides the same information with a more tabular arrangement and fewer words.

3.11 Methods of selecting pretest respondents.-- Eventually the time comes when the questionnaire needs to be tried out in actual interviewing situations before any further progress can be made. The respondents may be designated in one of several ways:

- (1) Scientific selection of a sample from the general population.
- (2) Arbitrary selection. Respondents would be selected on the basis of convenience rather than by scientific procedure.
- (3) Purposive selection. Respondents with an already known characteristic would be selected for the pretest; for example, agricultural holders known to irrigate and fertilize their crops would be selected to test the questions on irrigation and fertilizer. When interviewing these persons, care must be taken to prevent them from becoming aware of this prior knowledge lest such awareness bias their answers.

The first method is usually preferred if there is sufficient time and resources to carry the test out successfully, since it more nearly simulates what will actually be done later. However, if parts of the questionnaire are applicable to only a small proportion of the population (for example, questions on hired managers or chieftains or questions on hired labor), some purposive selection may be necessary in order to adequately test these questions. Arbitrary selection has obvious disadvantages in that the results may be biased; nevertheless, considerations of money, time, and personnel may allow a country no alternative.

3.12 Selection of enumerators for pretest.-- The experience and background of the persons used in the pretest can influence the results. For this reason, professional staff members who have designed the questionnaire or who are knowledgeable in the subject matter covered by the questionnaire should not be used to pretest it. Instead, the persons selected for pretesting should be of the same general caliber and have the same type of background as those who will be doing the actual census. Thus, for example, if one expects to use persons with a rural background in the census, one should not employ in the pretest persons with an urban background.

3.13 Language problems.-- Where differences in language, dialects, and idioms exist in the country, it is essential that the pretest include various language groups. It is not unusual for a particular question to have one meaning for one group of people and an entirely different meaning or connotation for another group. Insofar as possible, question wording should be simple enough to be understood by everybody.

3.2 *Reaching conclusions on the basis of pretesting*

Information about the effectiveness of the questions and of the questionnaire can be developed in three ways: (a) by observation of the actual interviewing situation, (b) by review of the completed pretest documents, and (c) by examination of statistics developed from the completed pretest documents.

3.21 Observation.-- Ordinarily, observing actual interviews is the most informative of the three procedures. It is sometimes asserted that an observer by his very presence biases the results and thus limits or destroys the usefulness of the information gained. It is true that the presence of an observer usually does influence to some extent the behavior of both the enumerator and the respondent. Nevertheless, the advantages of such observations outweigh the disadvantages. Without it, one has only the opinions of the enumerators to rely on for information on how smoothly the questioning flowed, how well the respondent understood the questions, and the like. This is at best a poor substitute for the information to be obtained by a third party sitting quietly to one side while the interview takes place. That is not to say that the opinions of the enumerators should not be solicited, but such information should be used to supplement rather than to replace the observer's information.

3.22 Review of documents.-- Careful review of completed pretest documents can often give insight into problems that exist. An experienced professional staff should examine each document and try to reconstruct the respondent's situation.

The reviewers should be especially watchful for inconsistencies or for unusual responses which, if they occur repeatedly, will indicate that the difficulty lies in the questions or the questionnaire rather than in the enumerator or respondent.

3.23 Analysis of statistical data.-- Finally, if the pretest respondents have been drawn in a scientifically selected sample and if the sample is large enough to yield reasonably reliable estimates, data can be tabulated from the pretest questionnaires and analyzed statistically. This can be a particularly useful method for testing alternative wordings for certain questions or alternative layouts of the questionnaire. The sample can be divided randomly into several subsamples and the various alternatives assigned at random to the subsamples. If the results among the groups differ, this will indicate that some of the alternatives are more effective than others. It will not tell, however, which alternative is the best to use unless some independent data are available with which the sample results can be compared. In the absence of such independent data, the final decision will have to be based on the analyst's judgment as to which results are the more reasonable. One must, of course, not attempt to test too many alternatives lest the effects of the different procedures become so intermixed that the individual effects cannot be separated out. This is particularly true if, in addition to question wording, one is also testing alternative layouts and sequences.

3.3 Cautions regarding interpretation of results

Some of the difficulties involved in drawing valid conclusions from pretesting results have already been alluded to. These relate to biases introduced by purposive selection, the presence of observers, etc. To generalize, it should always be borne in mind that the pretest procedure cannot simulate exactly the final procedure that will be used; any conclusions drawn, therefore, should be tempered by this realization. Even if great care were taken to reproduce the anticipated

field procedure in every detail, the very fact that it was a pretest rather than the real thing would have some effect on the performance.

4. AGROSTAN FIELD PRETEST

A pretest of limited scope was planned for January 1971, for the Provinces only. The NSO felt that this date would be desirable since the conditions at the time would simulate those which would be found in the census in January 1972. A very informal pretest was planned for the Northern Territory in November 1970.

4.1 Scope of the pretest in the Provinces

Because of limitations of the total resources available for the census, it was not possible to test the survey procedure as a whole; instead, attention was focused on the questionnaire. A listing operation was carried out as part of the pretest, but the purpose was to see if the listing form (which was essentially the same as the final version, Form A-2a) contained any unsuspected flaws, rather than to test any specific alternatives.

4.2 Selection of pretest respondents

Three areas were selected for the operation in order to get some experience with different types of agriculture. These were in the provinces of Lopez, Dewar, and Rajpur. In each area a crew of four enumerators was selected, trained, and supervised by staff members from the NSO. Primarily because of cost, no attempt was made to select the pretest respondents on a scientific basis. Instead, each enumerator was assigned a particular subdistrict in which to list housing units and obtain questionnaires. He was told to work in a different area each day and to attempt to locate a variety of different sizes and types of operations. Six days were allotted for the field work.

4.3 Major test items

The group who designed the questionnaire included both persons experienced in data collection

and persons with expert knowledge of the country's agriculture. Consequently, many decisions were made on the basis of their professional judgment and were not tested in the field. For example, they knew in advance that it would be necessary to allow area to be reported in different units of measure. The decision regarding which crops to list specifically in Sections III and IV was likewise made in the office as was the decision to use the 4-column format for reporting the unit of production. More detailed questions on such subjects as income, use of hired labor, use of machine power, and possession of equipment were considered but for various reasons rejected at some stage prior to the field pretest.

The field pretest was concerned, then, primarily with format rather than with content. Two versions of the questionnaire were used differing from each other in the following major ways:

- (1) On one version of the questionnaire, the sections on crops and livestock were in tabular form. That is, the various crops and livestock were simply listed by name and the columns for recording the data merely headed "Area harvested," "Production," or "Number." The other version provided specific questions to be read by the enumerator both in specifying the items to be reported and in asking for amounts.
- (2) On one version of the questionnaire, a single question asked for all the land the holder rented from others or operated on some other basis (that is, other than as an owner or renter). Space was provided for the enumerator to write in the arrangement and, if rented, the amount paid. The second version was much like the final version. Two questions were used, one asking only about rented land and the other asking about all other arrangements.
- (3) One version of the questionnaire asked for detailed information on sales of agricultural products. Instead of providing categories, specific amounts were asked for four classes of products — crops, livestock and livestock products, poultry and poultry products and other products. In addition, the questionnaire asked for the amount received from the sale of the leading crop and of the leading type of livestock or livestock product. The other version used the same question as appears on the final questionnaire (question 108).

4.4 Results

Altogether, 321 questionnaires were completed, divided about equally among the three areas. The enumerators did a good job of finding different sizes and types of operations. The following decisions were made on the basis of the pretest results:

- (1) It was decided that the tabular approach to obtain crop and livestock data, although it had some advantages over the alternative, was not worth the risk known to be present in allowing enumerators to use their own words in asking questions.
- (2) It was decided to use the separate questions for obtaining land rented and land operated on other terms. Although not part of the test, it was further decided on the basis of the pretest experience, to itemize the rental arrangements as they now appear in item 6(a) rather than just leave space for the enumerator to write the arrangement. The latter format was too confusing when several different arrangements had to be described.
- (3) The more complicated question on sales of agricultural products was reluctantly discarded in favor of the simpler approach. Many of the respondents could not answer it and many more objected to answering it. This was not unexpected and, in fact, the more complicated question was eliminated at one time in the office. At the last minute, it was decided to give it a trial in the pretest in the hope (rather than on the expectation) that it would be successful.

The pretest produced one unexpected result. On both pretest questionnaires, the questions on fruits, nuts, etc. asked only for the total number of plants and the total area in plantings. It was discovered that when plants were scattered in a wild or semi-wild state, the respondent had difficulty giving the area; moreover, the answer, even if given, was somewhat meaningless. Consequently, it was decided to ask for area only for compact plantings and to ask for number of plants for compact and scattered plantings separately. The designers of the questionnaire probably should have anticipated this situation in the office; nevertheless they did not do so. This points up the fact that the field pretest can serve also as a means of detecting oversights on the part of the planners of the survey.

4.5 Pretest in the Northern Territory

As mentioned above, the pretest in the Northern Territory was very limited. District marshals were asked to comment on the draft questionnaire and to try out the area measurement technique for a few holdings in their districts.

As a result of their comments, the questionnaire was shortened considerably. Important revisions of the questionnaire included the following:

- (1) The number of equipment items was reduced from nine to the four shown in Section IX of the Agriculture Questionnaire, Form A-1b. The items which were deleted were those which the marshals felt would occur only rarely.
- (2) Questions on hired workers and family income were eliminated altogether. Practically all the marshals commented that the answers to these questions would be subject to considerable response error.
- (3) Questions on crop production were limited to the five principal commercial crops, which generally were grown on the larger holdings.
- (4) The questions on irrigation and fertilization, as they appear in Section VI of Form A-1b, were added at the suggestion of the marshals.
- (5) The method recommended for area measurement appeared to be a feasible and practical one.

Although the pretest was not a formal test, it was felt that the suggestions contributed by the nine marshals who participated were most helpful.

5. FORMS USED IN THE FIELD OPERATIONS

A list of all the forms used in the field in the 1971 Sample Census of Agriculture is given as exhibit V-2-3; the forms themselves are presented as exhibits V-2-4 through V-2-22. These forms, several of which are discussed individually in the following paragraphs, were designed with the foregoing principles in mind. This discussion coupled with a thorough study of the exhibits should clarify these principles.

It will be noted that uniformity in general format, type size, use of verbatim questions, and use of arrows and instructions to the enumerator

was achieved insofar as was feasible. Uniform paper size also was observed when possible, and the color of the paper was varied.¹

5.1 Agriculture Questionnaire, Form A-1a

The Agriculture Questionnaire is the basic document of the agriculture census in the Provinces. As would be expected, information is sought about the amount of land comprising the holding, the tenure arrangements whereby this land is used, the kinds and amounts of crops produced, the kinds and amounts of livestock on the holding, and the value of sales of agricultural products. Inquiry is also made into such topics as source of power used on the holding, types of equipment used, hired labor, and certain characteristics of the holder's family. An examination of the form will show that most of the inquiries are in the form of questions to be asked verbatim. An exception is noted in the column headings of Section XI; these are relatively simple items and often do not require direct questions (see exhibit III-2-1).

Notice that questions to be asked are in heavy type and statements to be read to the respondent are in a modified type (to avoid excessive use of bold print); both are easily distinguishable from the lighter type used for the instructions to the enumerator. Arrows are used in several places as guides. Columns that require no enumerator entries are shaded (although the editors may use this space, as in column 83d). The identification items are in a prominent place on the front page as a convenience to the enumerator and the key puncher who will have to punch this information on all data cards. In the sections on crops and livestock (Sections III, IV, and VIII) notice that there isn't any box for a "No" response for each item separately; this, too, is for the convenience of the key punch operators who can quickly scan the boxes and concern themselves only with those that have a check

¹The forms prepared for the Agrostan case study are reproduced in this booklet on white paper and generally reduced in size. The principal data-collections and control forms are presented in actual size and color in Agrostan: A Case Study for the 1970 World Census of Agriculture, Principal Data-Collection and Control Forms.

for "Yes." Questions 23 and 39 have been omitted deliberately. Should the "catch-all" questions in these categories uncover a crop of importance that, perhaps, should have been listed separately, it can be given the omitted number and, thus, distinguish it from the other crops elicited by the "catch-all" questions. For reporting area, tenths are expressed as a fraction rather than a decimal, on the assumption that the enumerator would be more careful when writing the numerator of a fraction than when writing a figure to the left or right of a decimal point.

The size of the questionnaire, approximately 14 inches by 16 inches, does not conform to standard paper size in Agrostan. An exception was made for this form to permit an arrangement of items which would be convenient for the coder and the card punch operator, as well as for the enumerator. For example, all the tenure questions are on one page, the questions relating to crops are on facing pages, etc.

5.2 *Listing Book, Form A-2a*

The Listing Book is used to list every housing unit in the enumerator's assigned PSU; it is designed to provide both a record of the enumerator's canvass of the area and an instrument for discovering which housing units contain operators of holdings. The form will serve as a sample frame from which the district supervisor will select a sample of holdings requiring agriculture questionnaires and also serves as an assignment record. Furthermore, items (e) through (u) on the front will be used for control purposes as well as certain columns on the listing page; inside the front cover are some "reminders" to the enumerator and on the inside of the back cover is space for summarizing page totals. Clearly, the Listing Book is a form of many uses.

As was the case with the agriculture questionnaire, questions to be asked by the enumerator are in heavy type; instructions are in lighter type. Column headings that are not in the form of questions (for example, columns 1, 2, 3, and 16) are in still another kind of type. The

columns to be filled by the district supervisor are so indicated in the heading and, in addition, are shaded. Similarly, the control items on the front cover completed at each level (enumerator, district supervisor, PCO, and NSO) are clearly labeled and should cause no difficulty (see exhibit V-2-4).

5.3 *National Certainty Listing Form A-2c*

The National Certainty Listing Form, like the Listing Book, is both a field-use form and a control form. The same form is used by several persons for different purposes. Although consideration was given to using more than one form, it was decided that a single form could be used for all these purposes without difficulty (see exhibit V-2-5).

The first person to use the form will be the district agricultural agent. It is his job to compile the National Certainty List in his district. He will enter on the National Certainty Listing Form all holdings that qualify as National Certainty holdings; he will make one carbon copy. Both the original and the carbon will be sent to the province office of the Ministry of Agriculture. This office will keep the carbon and send the original to the NSO. The NSO, using this copy, will type a set of three National Certainty Listing Forms:

- (1) A buff (original) copy which will be sent to the PCO and given to the district supervisor.
- (2) A salmon copy to be kept as a control by the PCO.
- (3) A white copy to be kept by the NSO.

In addition to the information provided by the district agricultural agent, these copies will contain the preliminary A-1c number in column 7 (starting with 701 in each district) and an indication in column 8 of whether or not a questionnaire is to be mailed to this holding. The NSO will mail the questionnaire later. The typist then draws a line just below the last entry made on the form.

The district supervisor uses his copy when he tours his district to plot the locations of these holdings on his map. If he discovers any additional holdings that should have been on the list, he adds them below the line drawn at the NSO. When he decides upon his assignments, he will make up separate copies of the form for each enumerator showing just the holdings assigned to that enumerator; these will be on white paper and marked "enumerator's copy". The enumerator uses the form as an assignment form and, upon completion of the questionnaire, enters the necessary information in the appropriate columns.

Notice the way in which the form is set up so that each person can easily complete the columns appropriate to him without becoming confused. The use of a single form saves the cost of designing and printing several forms.

5.4 Observation and Review of Agriculture Questionnaires, Form A-122

The form for observing and reviewing the filling of questionnaires (exhibit V-2-12) serves two main purposes:

- (1) It presents the field supervisor with a detailed list of things he should be watching for when he observes an enumerator and things he should check when he reviews completed work. Without such a list, he might easily overlook important aspects of the enumerator's performance that are not being done well.
- (2) It provides him with a ready reference when he makes subsequent visits to the enumerator. Prior to these visits he can use the forms to refresh his memory and, thus, be alerted to the items that need particular attention. At the end of each visit, he can determine quickly whether or not the enumerator is showing any improvement.

The form is primarily intended to aid the field supervisor in performing his duties; however, if future studies are anticipated using any or all of the same enumerators, these completed reports should be sent to the NSO at the completion of the census and retained as part of the file for the enumerator in question.

A different form A-122 is used at each visit. Since many of the items are about specific procedures in completing the questionnaire, space is allowed for recording the results of several interviews separately. Provision is made for using the form to record the results of review as well as observation. Although the form is fairly long, it should not be particularly difficult to fill. The items follow the sequence of the questionnaire itself so that as the supervisor observes the enumerator or reviews his work, he can easily go down the list and make the entries in order. If he wishes to make additional notes about any item, space is provided nearby. At the end of the form are several items that are completed with reference to the overall performance for the day.

5.5 Observation and Review of Listing, Form A-121

The form for observing and reviewing the listing operation (exhibit V-2-11) is quite similar to the form just discussed and serves the same general purposes except A-121 concerns the listing operation. Since most of the items pertain to the enumerator's general performance rather than with his performance at a particular household, the results of the entire day's observation or review can be shown by a single entry for each item. Five visits can be recorded on one form.

5.6 Other field-use forms

A number of other forms are needed to carry out the field operations in the census. An effort was made to keep the size uniform, vary the color of the paper, and hold the number of forms at a minimum. The staff generally favored single-purpose forms, on the basis that they would be less confusing for a one-time enumeration than forms which could be used for several activities.

A list of the field-use forms, with a brief description of their purpose, is provided in exhibit V-2-3.

Chapter V - 3. ENUMERATOR INSTRUCTION AND TRAINING

1. INTRODUCTION

The quality of the data collected in a census depends ultimately on the quality of the enumerators assigned to collect it. It follows that the recruiting and training of the enumerator staff is of vital importance in assuring the success of a program such as the Agrostan Census of Agriculture. This chapter discusses some of the important points to be considered in planning and carrying out an effective training program for enumerators.

2. ENUMERATOR'S REFERENCE MANUAL

The backbone of any enumerator training program is the Enumerator's Reference Manual. Much of the formal training will be devoted to a thorough study of this manual. Supplementary training in the field will often consist to a great extent of reviewing portions of the manual. Finally, the enumerator will have the manual with him at all times as a reference with which to train himself to do better work.

2.1 Scope of the Manual

The Enumerator's Reference Manual should cover in detail everything the enumerator needs to know in order to do a competent job. In addition, it should give the enumerator sufficient background to understand the purpose of the program and the importance of his role in it. It should cover not only the usual situations the enumerators can expect to encounter but also any unusual situations which are likely to be met at least a few times by most of the enumerators. No attempt should be made to provide detailed instructions for extreme situations. Rather, the enumerator should be taught general principles and concepts that will enable him to handle these situations on his own or

at least to recognize them as being unique and requiring help from his supervisor.

2.2 Arrangement of the Manual

The manual should be divided into chapters to enable the enumerator to read and understand it and to extract the major points. At the beginning of the manual, there should be a general description of the entire operation so that the enumerator can better understand the overall aim of the program and the part he is to play in it. A summary of the enumerator's job should also be given to prepare the enumerator for the detailed instructions that follow and to enable him to understand how the various tasks he must perform fit together. Included in this summary should be some discussion of the field forms and their purposes. A discussion of interviewing techniques should also be included here.

The bulk of the manual will be devoted to detailed instructions for completing the questionnaire and any other field forms that the enumerator must master. Usually, the best approach is to discuss each item or question in sequence telling the interviewer in detail how to complete the item. At the same time any concepts that may not be clear should be discussed and defined. Any problems that can be expected to occur fairly frequently should be discussed so that the enumerator will be prepared in advance to handle them. A separate chapter may be devoted to problems or concepts that are expected to be particularly troublesome; this procedure will give particular emphasis to these problems which otherwise might not be recognized as being of special importance.

Finally, a chapter should be devoted to administrative details. This chapter would include

information about hours of work, pay authorizations, and the like. It should also contain some discussion of the enumerator's obligations as an employee of the government and a summary of the rules to be observed (for example, rules against soliciting, political activity, and the like). Special attention should be given to the need for respecting the confidentiality of the information obtained.

As an aid to the enumerator, the manual should contain a table of contents at the front and an index at the back. Numbering of subsections and including side headings beside each subsection in the left-hand margin have been found to be very useful. Not only do these make the manual easier to read and study originally but also they make it much easier to find particular things later, thus enhancing its value as a reference.

2.3 Enumerator's Reference Manuals, Forms A-50 and A-51

Two Enumerator's Reference Manuals have been prepared for the 1971 Sample Census of Agriculture. Form A-50 is for use in the Provinces, and Form A-51 for use in the Northern Territory. The two are quite similar in general format and have been constructed in accordance with most of the principles cited in the preceding paragraph. They are presented as exhibits V-3-1 and V-3-2.

The manual for the Provinces is divided into 6 chapters as follows:

- (1) Chapter 1 gives a general introduction to the program and points on how to interview.
- (2) Chapter 2 discusses the listing operation and gives detailed instructions for completing the Listing Book.
- (3) Chapter 3 contains a general discussion on filling the Agriculture Questionnaire.
- (4) Chapter 4 contains detailed item-by-item instructions for completing the questionnaire.
- (5) Chapter 5 discusses some special problems and concepts that the enumerator may need to know about.
- (6) Chapter 6 is devoted to administrative matters.

Each subsection in the manual has been numbered or lettered; brief headings in the left-hand margin give some idea of what the subsection is about.

The manual for the Northern Territory contains 7 chapters. The first 5 chapters cover the same general topics as do the first 5 chapters of the manual for the Provinces, except that chapter 2 includes instructions on how to select the sample of holdings for the Agriculture Questionnaire. Chapter 6 discusses area measurement, and chapter 7 covers the administrative matters.

3. TRAINING OF ENUMERATORS

As has already been pointed out, the training of the enumerator staff is a very important undertaking. Every effort must be made to assure that it is done well. Some of the general features of a good training program are discussed here.

3.1 Types of training

Although one tends to think primarily of formal classroom sessions when one thinks of training, this is only one aspect of a complete training program. Even before the classroom training, an enumerator may be asked to complete a program of self-study. After the classroom training (or even as part of the classroom training) the enumerator may receive on-the-job instruction in actual interviewing situations. Finally, some sort of remedial training after the enumerator has worked for a while is almost always necessary.

3.11 Self-study.--Self-study lessons making use of "programmed learning" techniques have been used to familiarize the enumerator with basic concepts and procedures in advance of group class sessions. In this process, each concept or procedure is divided into simple ideas which the trainee can learn easily. Each of these ideas is then built into an integrated whole.

As the trainee studies the material at home he is asked simple questions concerning it. The answers are provided, but the trainee is supposed

to record his own answer before looking at the given answer. In this way, he is able to monitor his progress and review those ideas which he failed to grasp.

Along with the self-study, the enumerator may be required to take tests which are sent in to the office to be corrected. These will then be returned to him so that he can see which topics require further study. These tests provide some control in assuring that the trainee completes his self-study and, since they are corrected, provide him some incentive for doing his best work.

This approach, in addition to making use of the newest teaching techniques (programmed learning) has the additional advantage of allowing the trainee to progress at his own learning speed, taking as much time as necessary for parts that he finds difficult and, at the same time, not spending more time than necessary on parts that he understands.

3.12 Group class sessions.--At some point in the training program, the enumerators must be brought together for group sessions. If a self-study program has been used, the material presented in this program will be reviewed; if not, the material will be presented at this time. Some time will be devoted to practice interviewing. "Mock interviews" will be conducted which will be designed to illustrate both the general procedures and some of the procedures to be followed in unusual cases. Usually the trainer will act as the respondent while the trainees take turns acting as enumerators. Some practice in actual field interviewing may be included also.

Generally there will be some procedures and concepts which will be too complex to be learned by self-study and will have to be taught in group sessions. Even if this were not the case, group training would still be highly desirable. The interaction of trainees with each other and with the trainer will almost surely improve the understanding of everyone involved. Furthermore, it is often the case that such sessions uncover problems that were completely overlooked by those who planned

the program; it is much better to discover them at this point than to have them make their first appearance after the field work has started.

3.13 On-the-job training.--Regardless of how well planned and how well executed the training program has been, much of it will not have meaning for the enumerator until he has actually begun working. Consequently, some on-the-job training is necessary to solidify what has been taught in the classroom and in the self-study. If possible, this should start even before the classroom sessions are over by devoting part of the time to actual practice in data collection. At least half a day (more if necessary) should be set aside for the class to go out to the field so that each trainee can complete a few practice questionnaires under the supervision of the trainers.

In addition, the supervisor should visit each of his enumerators as soon as possible after the field work has started so that he can give the enumerator additional on-the-job training right at the start of his assignment.

3.14 Remedial training.--Remedial training is given on an individual basis by the supervisor when he discovers that an enumerator is not doing good work. Often it will take the form of additional on-the-job training. When the supervisor visits the enumerator, he will observe his performance and review his work and then offer suggestions for improvement. For some enumerators, however, it may be necessary to actually go over some parts of the manual again in much the same way as was done originally at the group training sessions.

3.2 *Principles of training*

The details of any training program are, of course, dependent upon the particular job being undertaken. Nevertheless, certain general principles are applicable to all situations. Certainly the trainer, if he is to do a good job, must thoroughly understand the concepts underlying the program and the procedures adopted for carrying it out. He should be instructed in basic training techniques and he must become thoroughly familiar

with all the detailed instructions, forms, and the other materials that will be used. The material to be presented must be approached in a logical order. The trainees should be given ample opportunity to participate in the sessions, to ask questions, and bring up problems for discussion. However, the trainer must maintain some control over the direction these discussions take; otherwise, the trainees may tend to stray far off the main subject or get too involved in minor details about problems that rarely ever have to be met. The method of presentation should be diversified so as to retain the attention and interest of the trainees. Techniques that can be used to achieve this include asking questions frequently, stopping to discuss some points of particular interest or difficulty before going on to the next instruction, giving demonstrations, and using visual aids.

3.3 Preparation for training sessions

The trainer should review the materials thoroughly and plan how the sessions will be conducted. He should make a detailed outline of what is to be taught so that topics will be presented in their proper sequence. Even if he is using a verbatim guide, the trainer should jot down illustrations that would be appropriate and would help to clarify some point, questions he plans to ask, and points he wishes to emphasize. He should determine how much time he should allot to each topic so that important ones are not omitted or are given too little attention. Matters relating to the distribution of materials to the trainees, the accumulation of needed supplies, and the physical arrangements (seating, proper lighting and ventilation, etc.) should all be taken care of well in advance of the time the class is to begin. These points are discussed in greater detail in the Field Supervisor's Manual, Form A-60 and A-61 (exhibits V-4-1 and V-4-2).

3.4 Materials for training

3.41 Self-study units.--As referred to earlier, self-study units usually consist of a series of short paragraphs defining a concept or giving

the details of a procedure to be followed. Many of the paragraphs are followed by a statement with one or more blanks (each blank representing an omitted word) which the trainee is to fill on the basis of the information given in the preceding paragraph or by a question which the trainee is to answer. The correct answers are provided (perhaps in a column beside the reading material), but the trainee is supposed to fill in the blank or answer the question before looking at the answer. Having done this, he looks at the answer that is provided; if his answer was incorrect he corrects it. In order to benefit from this, he must at the same time determine to his own satisfaction why the answer provided rather than his is truly the correct one.

The self-study units are arranged so that the information is provided in a logical sequence. Incorporated in them are a number of short tests that will help the trainee check his progress in understanding the procedures and concepts covered in the lesson. The answers are usually provided so that the trainee can check his results immediately.

3.42 Enumerator's Reference Manual.--The Enumerator's Reference Manual contains the detailed explanations of all the concepts and procedures which the interviewer will normally need to know. It also provides instructions covering most of the unusual situations that are likely to be encountered. Much of the training class time will be devoted to studying this manual. However, the enumerator cannot be expected to remember everything he is taught. He will often need to consult his manual for the answers to problems when he is in the field. Consequently, an important part of the training consists of familiarizing the trainee with the contents of the manual and teaching him to use the manual on his own to find the answers he needs.

3.43 Training guide or outline.--Training materials for the trainer at a group session may take the form of an outline or a verbatim guide. An outline would show the main topics the trainer should cover. It has the advantage of permitting the trainer to use his own words, which can often

be more effective. On the other hand, there is always the possibility that a trainer may not be able to express his ideas clearly which can cause all the trainees to miss an important point or misunderstand a basic concept. Furthermore, there is the danger that important ideas or procedures will be underemphasized. Another drawback is the failure of some trainers to pace themselves properly; some may go too rapidly and fail to cover the material adequately, while others will go too slowly and fail to cover certain portions of the material.

A training guide is intended to eliminate most of the problems cited and to insure greater uniformity in training among the training centers; however, in doing so, it will introduce some new problems. Since it is to be read word for word, and since some people find it difficult to read with expression, a class session which lasts for hours can become very tedious. To offset this, the training guide should call for frequent trainee participation in the reading, and there should be frequent breaks for questions, discussion, and the like.

Although the trainer is expected to follow the training guide closely, he should not do so to the extent of refusing to allow any outside material to be introduced. The guide cannot anticipate everything that will arise nor should it be expected to. Spontaneity must be not only permitted but even encouraged.

3.44 Visual aids.--Visual aids should be used as much as possible since they can be very helpful in clarifying parts of the discussion. Furthermore, they provide a welcome break from studying the manual and give variety to the presentation methods. Among the materials that might be used are charts, diagrams, filmstrips and the like. Throughout the entire session, frequent use should be made of a blackboard if one is available. Another device that can add to the effectiveness of the classroom training is a workbook. This workbook would be similar to the self-study workbooks except that it would be designed to be used in class.

3.45 Mock interviews.--The use of practice interviews can be a very valuable device for illustrating the concepts and procedures. The trainer will usually act as the respondent while the trainees take turns acting as enumerators. The answers to be given should be prepared in advance; if the trainer attempts to make up answers as the interview progresses, he will almost certainly get into trouble by giving inconsistent or unreasonable data. The practice interview should not be too difficult or unusual; at the same time, it will not be very useful if it is too easy. Similarly, the trainer should not respond too clearly and readily; he should attempt to simulate an actual interviewing situation as closely as possible.

3.46 Review tests.--Review tests administered by the trainer can also be useful training materials. To be effective, tests should be taken at intervals during the training rather than waiting until the end, although a final test may be given also. The tests should be thought of primarily as devices to enhance the learning process; the fact that they are to be given should motivate the trainees to study harder, or listen more carefully; in addition, reviewing the test after it has been corrected and returned to the trainees will generally be very helpful. The tests may also be useful in pinpointing the weaker trainees who will require special attention or perhaps even replacement.

4. AGROSTAN TRAINING PLANS

The training plans for the Agrostan Census of Agriculture are generally in accordance with the principles discussed in the preceding paragraphs, although not everything discussed will be included.

4.1 Provinces

Group training sessions are scheduled to be 4 days in length. The training will be given by the district supervisor. The technical assistant from the PCO may be there also to assist. In some

instances, joint training sessions may be held involving two or three supervisors and their enumerators. A verbatim guide will be used for the classroom training. Much of the classroom time will be spent in understanding the concepts, learning how to use the Enumerator's Reference Manual, and practicing mock interviews. Portions of the training guide including the mock interviews are shown in exhibit V-3-4. An outline of the complete guide is given as exhibit V-3-3. At least one day of the group training will be spent in the field practicing the listing procedure and filling practice questionnaires.

The enumerator training will not include having the enumerators complete a self-study course (at home) in advance of the group training; instead, an Enumerator's Workbook will be used. The workbook will contain short training exercises consisting of questions to be answered and hypothetical problems to be solved. Periodically during the training, the enumerators will complete the exercises relating to the material just covered. They will be given the correct answers so that they can evaluate their progress and raise questions about any points they have not understood.

The materials in the workbook are intended as a learning device supplementing the classroom

lectures and discussion. They also help add variety to the presentation methods, and enable all enumerators to participate in the training to a fuller extent than is the case when individuals are called upon one at a time to answer questions orally. A portion of the Enumerator's Workbook is illustrated in exhibit V-3-5.

The supervisor will accompany each of his enumerators for at least a half day in the early stages of the field work. Several subsequent visits will be made, at which time the enumerator's performance will be observed and his work reviewed. He will be given remedial training at that time if it appears to be necessary.

4.2 Northern Territory

The training plans in the Northern Territory will be quite similar to those in the provinces. Because of the distances involved, joint sessions will not be held; instead, each supervisor will train his own enumerators. Four-day sessions are scheduled. However, less time will be spent on the questionnaire and more time spent on other topics (particularly sampling and area measurement) than will be the case in the Provinces.

Chapter V - 4. FIELD SUPERVISOR INSTRUCTION AND TRAINING

1. INTRODUCTION

Although the enumerator staff may have the potential to do high quality work, this potential will not be realized if the field supervisory staff is not equally capable; consequently, the recruiting and training of the field supervisors is, if anything, even more important than the recruiting and training of the enumerators. This chapter discusses some of the important points to be considered in planning and carrying out an effective program for obtaining and training field supervisors.

It is wise to hire and train a few additional persons to serve as supervisors in the event that some will not be able to complete their assignments. The Agricultural Agents in the districts (or employees in the territorial office who are familiar with the agriculture in the Territory) may be a source of reserve field supervisors.

2. SCOPE OF SUPERVISOR'S DUTIES

The supervisor's duties require a person who possesses not only ability but also versatility. In a large-scale operation such as a census, the supervisor will usually have to perform all or most of the following jobs:

- (1) Recruit and hire his enumerators.
- (2) Train his enumerators.
- (3) Assign work to the enumerators under him.
- (4) Observe the enumerators during listing and interviewing.
- (5) Review the completed work of his enumerators.
- (6) Keep administrative records for himself and his enumerators.

Thus, the supervisor must be a combination of personnel officer, teacher, executive, technical expert, enumerator, and administrative clerk. He

must learn to play several different roles, each of which requires him to master a different set of rules.

3. FIELD SUPERVISOR'S MANUAL

Once the supervisor has been trained, he is to a large extent on his own. He cannot be expected to absorb and remember everything taught to him during his training; therefore, he will need to have a manual to use as a reference later. This manual should also form the basis for his training program.

3.1 Scope of the Manual

The supervisor's manual need not include all of the detailed information about the enumerator's job. The supervisor, will, of course, have to be completely familiar with the enumerator's duties as outlined in the Enumerator's Reference Manual. In fact, learning the enumerator's job will probably be the most difficult part of his training; he will learn this the same way the enumerators will learn. The supervisor's manual should include detailed instructions for all the other tasks which the supervisor must perform. These instructions should be supplemented by a discussion of the general principles involved in each activity. Depending upon the particular project involved, most or all of the following should be included in the manual:

- (1) Principles and detailed instructions for recruiting and selecting enumerators.
- (2) Principles and detailed instructions for training enumerators.
- (3) Principles and general procedure for supervising the enumeration.
- (4) Principles and detailed instructions for observing the enumerator and reviewing his completed work.

- (5) Instructions for performing administrative duties.

3.2 Arrangement of the Manual

As was the case with the enumerator's manual, the supervisor's manual will serve both as a training document and as a reference. It is necessary, therefore, that the manual be planned carefully so that the supervisor can read and understand it initially and so that he can easily find particular items later on. The subject matter, as itemized above, divides rather easily into chapters. Full use should be made of subheadings or side headings within chapters as well; these should be numbered so that they can easily be referred to in the index and found by the user. Most of the subject matter will fall rather readily into a chronological sequence and should logically be presented in that order in the manual. An introductory chapter should be included which would give an overall view of the project and of the supervisor's role in it together with a summary of the supervisor's duties. Administrative duties, forms to be filled, and the like, which are related to only one activity should be discussed at the same time as that activity is discussed. General administrative duties relating to the entire job are more easily described in a separate chapter at the end of the manual. Both a table of contents and an index should be included.

Not every situation that might conceivably occur can be anticipated and discussed, nor would it be desirable to do so even if it were possible. The result would be a manual of unreadable length in which the important points would be virtually lost among the trivial ones. Rather, the aim of the manual should be (a) to provide the necessary information and instructions to enable the supervisor to handle the common situations and those uncommon situations likely to be met at least occasionally; and (b) to provide sufficient background into the nature of the program and the principles underlying each operation to give the supervisor a sound basis for exercising his own judgment in resolving the remaining problems.

3.3 Field Supervisor's Manuals, Forms A-60 and A-61

Two field supervisor's manuals have been prepared for the 1971 Sample Census of Agriculture in Agrostan--Field Supervisor's Manual (Provinces), Form A-60, and Field Supervisor's Manual (Northern Territory), Form A-61. The two manuals (exhibits V-4-1 and V-4-2, respectively) are quite similar in format and are in general agreement with the principles cited above. Each is divided into chapters with subheadings within the chapters to further facilitate use of the manual. These subheadings are comparable to the side headings used in the Enumerator's Reference Manuals (Forms A-50 and A-51). Although the chapters in the two manuals differ in specific details, they cover the same general topics and have the same titles as follows:

- Chapter 1 - Introduction
- Chapter 2 - Preliminary Operations
- Chapter 3 - Recruiting and Hiring Enumerators
- Chapter 4 - Training Enumerators
- Chapter 5 - Supervision of Field Work
- Chapter 6 - Administration

Administrative duties and related forms that are appropriate to only one operation are discussed in the chapter for that operation; the administrative items discussed in chapter 6 are those general duties not identifiable with any one particular operation as well as general rules of conduct that the supervisors, as employees of the NSO, are expected to obey.

The Field Supervisor's Manual, together with the Enumerator's Reference Manual, should provide the supervisor with all the information (both general and specific) required for him to perform his duties.

4. TRAINING

The training of supervisors does not differ in principle from the training of enumerators as discussed in chapter 3. In fact, since the supervisor must be thoroughly familiar with the enumerator's job in order to properly supervise him, part of the supervisor's training should consist of the same training as is given the enumerators.

If the supervisor is also to train his enumerators and conduct some interviews himself, he will surely have to receive this training. Thus the material in chapter 3 regarding the training of enumerators applies equally to the supervisors, the only difference being the purpose of the training and the use to which it is put. The supervisor will, of course, receive additional training for those additional jobs which he must perform; however, the principles underlying this training, the types of training that might be used, etc. do not differ in any important respect from what has already been discussed. A verbatim training guide has been prepared for this portion of the training. An outline of the guide is presented as exhibit V-4-3 and a portion from the guide as exhibit V-4-4.

The importance of the training program for supervisors cannot be overemphasized, particularly if they are expected to train their enumerators as well as supervise them. The potential of a single poorly trained supervisor for doing serious harm to the program then becomes obvious. The quality of the enumerator training is of great importance also, but a single enumerator's influence for better or for worse is relatively minor compared to a single supervisor's. Furthermore, a good supervisor will usually detect a poor enumerator fairly soon and take steps either to improve his performance or replace him before he can do much harm. A poor supervisor, on the other hand, may be much more difficult to detect for two reasons:

- (1) In general, it is not possible for the office to maintain as tight control over a supervisor as it is for a supervisor to maintain tight control over an enumerator. Often a supervisor may not be visited in the field by his superior more than once or twice.
- (2) The basis for judging the quality of a supervisor is less tangible than the basis for judging the quality of an enumerator.

A supervisor not only can observe an enumerator actually conducting an interview, but also has numerous completed questionnaires to review. A supervisor's superior, on the other hand, has much less opportunity to observe a supervisor

actually supervising an enumerator; even when he does this, he may have difficulty judging the supervisor's performance separately from the enumerator's. Moreover, by the time he has enough tangible evidence in the form of poorly completed questionnaires from several enumerators to conclude that the fault is with the supervisors rather than with the enumerators, much damage may already have been done.

Not only is it more difficult to detect an inadequate supervisor, but also it is more difficult to correct the situation. In the first place, merely retraining the supervisor may not be sufficient; it may be necessary to retrain his enumerators as well. In the second place, finding a replacement for a supervisor will almost surely be more difficult than finding a replacement for an enumerator. The only really feasible solution to the problem is to prevent it by hiring capable people and by making sure that they are well-trained to carry out their duties.

5. AGROSTAN TRAINING PLANS FOR THE PROVINCES

The duties for which the field supervisor must be trained break chronologically into two distinct parts.

- (1) The supervisor will tour his district in order to spot the National Certainty holdings on his map, to check on questionable boundaries on enumerator's maps, and subdivide certain large PSU's into two or more parts prior to selecting one part as the sample PSU. At this time he will also advertise for candidates for positions as enumerators; and following this, he will interview prospective candidates and select his staff.
- (2) The supervisor will train the enumerators and supervise the field work.

The supervisor will begin his preliminary activities by late November, but he will not train his enumerators and start the field work until late December and early January. Clearly it would not be possible to train the supervisors in November to perform all their duties when the most important and most difficult part of their job

will not begin for another 5 or 6 weeks; consequently, two training sessions will be held. Both sessions will be held at the PCO under the direction of the Technical Assistant.

5.1 Training sessions

The first session will be 2 days in length. It will include detailed instructions for locating the holdings on the National Certainty Listing Form, checking map boundaries, and subdividing PSU's as designated. Detailed procedures for recruiting and testing enumerator applicants and general guidelines for making wise selections will also be covered. In other words, this session will cover the material in the first three chapters of the supervisor's manual and at least part of chapter 6.

The second session will be more lengthy and more difficult, since it will include all the training that will be given the enumerators plus (a) special instruction in the principles of training and supervising enumerators, and (b) detailed instructions for carrying out these tasks. Thus, it will cover all of the material in the Enumerator's Reference Manual as well as the remainder of the material in the supervisor's manual. Moreover, at least a half day will be spent practicing in the field. The field exercise will be similar to that planned for the enumerator training session except that in addition to gaining experience in listing and in filling questionnaires, the supervisors will practice supervising each other in the performance of these duties. The second session will last 5 days.

5.2 Training guide

A verbatim guide will be used for the classroom training. A portion of the guide is shown in exhibit V-4-4; an outline of the complete guide is given in exhibit V-4-3. Note in the time

schedule for the second training session that training in supervision precedes instructions for training enumerators, the reverse of the chronological order; this is necessary in order to prepare for the field practice on the fourth day.

6. AGROSTAN TRAINING PLANS FOR THE NORTHERN TERRITORY

The training plan for the supervisors in the Northern Territory will differ from the plan in the provinces. Because of the difficulty of travel and the distances involved, it did not appear to be practical to hold two sessions as was done in the provinces. Instead, a single training session will be given covering all of the supervisor's duties--preliminary operations, training of enumerators, and supervision of field work. Fortunately, the preliminary operations in the Territory are limited to spotting the National Certainty holdings and hiring the enumerators. Moreover, since there will be no holiday period to cause delays, the training of enumerators can begin as soon as they are all hired. Also, since the questionnaires in the Territory are simpler than those in the Provinces, the training will be somewhat easier. Consequently, this plan appeared to be feasible.

Six days (18 to 23 October) have been scheduled for the training session. It will cover essentially the same general topics and be conducted in much the same manner as the two sessions to be held in the Provinces. The details will, of course, be different (for example, the sampling from the Listing Book will be covered as one of the enumerator's duties rather than the supervisor's and the enumeration instruction will include area measurement). Two weeks have been allocated for the preliminary work, with the enumerator training sessions scheduled for 8 to 11 November. The enumeration will begin as soon as the enumerators are trained.

Chapter V - 5. FIELD OFFICE STAFF TRAINING

1. INTRODUCTION

A capable field office staff can do much to assure the success of a data-collection operation. Although the office employees are not directly involved in the collection of the data, they perform an important function as the link between the central office and the people actually in the field. They must be responsible for the flow of materials to the field and to the NSO. Delays or errors can seriously affect the time, cost, and quality of the census. Thus, the quality of the field office staff has an important effect upon the efficiency of the entire census operation.

2. SCOPE OF FIELD OFFICE DUTIES

The duties to be performed by the field office are many and varied, although most of them can be generally described as administrative. Even before the enumeration starts, the field office will usually participate in the publicity program to alert the public to the approaching census. As the liaison between the central office and the field personnel, a major duty will be to transmit supplies, instructions, messages, and the like from the central office to the field and, in turn, to transmit completed work, requests, messages, and the like from the field to the central office. As part of this operation, they must keep records of what has been received and from whom, what has been sent out, etc. A necessary part of an operation such as a census is the maintenance of numerous records relating to employment, disbursement of funds, office expenses, and the like. Regular reports on the progress of the field enumeration must be compiled and sent to the central office.

The field office staff may also be required to review completed field work before dispatching

it to the central office. The purpose of the review would be to detect problem situations at an early stage and resolve them at the local level. On the other hand, such review should be kept to a reasonable minimum so as not to delay the transmittal of materials to the central office; moreover, if questionnaires are edited in a number of local offices, many inconsistencies in the decisions are likely to arise.

3. OFFICE MANUAL

Generally, some sort of manual for the field office staff will be necessary if for no other reason than to compile under one cover a list of all the things that must be done. What will be covered by the manual depends upon a number of factors that vary with the particular project.

The organizational structure of the office should be outlined. In addition, the duties and responsibilities associated with each position in the office should be summarized.

Routine office procedures such as typing, filing and the like should not be covered; the office staff should have general knowledge of these duties. Special features of this particular job (for example, details of the filing system) can be better taught by on-the-job training.

Certainly all forms that need to be filled should be discussed. It should not be necessary to give detailed instructions on how to fill every form, however. If a form is quite simple or if it already includes instructions for filling it, the manual need only give the purpose of the form and tell when it is to be used.

If the field office staff is to review the field work, the office manual will have to contain some instruction for the procedure. The staff will

need to know whether they are to review all of the work or just a sample of it; if they are to review just a sample of the work, they must be told how to determine which particular cases to review. They must also be told what to do if they find work that is unsatisfactory. If they are to edit as well as review, detailed instructions for this operation will be necessary.

4. TRAINING

The amount and type of training to be given the office staff will depend to a great extent on the particular project being carried out. Adequate training is important, of course, but the type of formal training that is given to the field supervisors and enumerators may not be necessary or appropriate for the clerical staff. No one person is likely to be performing all the different functions in the office; consequently, there is no need to train everyone to do everything. Furthermore, many of the jobs can be more easily learned through on-the-job training than by formal instruction. Also, unlike the supervisors and enumerators, the office staff will be under constant supervision. If they do not understand how to do something, their superior is always at hand to answer questions. If they are doing something wrong, he can correct them.

However, if the field office staff is to carry out a review of the completed field work, those persons assigned to this job will require special training. They will need to become thoroughly familiar with the data-collection forms and will need to acquire enough background to be able to recognize omissions, errors, or inconsistencies as such. Specific information on what items to review and what to do when errors are found will also need to be given them.

5. AGROSTAN FIELD OFFICE INSTRUCTIONS AND TRAINING

As has been mentioned previously, the 1971 Sample Census of Agriculture will require 14 field offices--one in each of the 13 provinces and one in the Northern Territory. The following general

discussion applies to the territorial office as well as to the province offices.

5.1 Manuals

Two manuals have been prepared--the Manual for the Province Office, Form A-70 and the Manual for the Territorial Office, Form A-71. These are shown as exhibits V-5-1 and V-5-2, respectively. Although the two manuals differ in some details, they are identical in format. They are divided into chapters as follows:

- (1) Chapter 1, as usual, describes briefly the entire project and gives the staff some idea of the role they play in carrying out the project. The various duties of the office staff (including the census officer, technical assistant, and administrative assistant) are summarized.
- (2) Chapter 2 discusses in greater detail the duties of the office clerical staff. The related forms are presented, where applicable. Information about the purpose of each form and when and how it is to be used is given. Detailed instructions for completing a form are included where necessary.
- (3) Chapter 3 deals with the review of the completed field work. Guidelines are presented for determining the amount of review to be carried out. The reviewers are told which types of errors they should be especially alert to discover. Rules are provided for deciding whether or not to accept the work.

The review operation will be relatively simple. The Listing Books will be reviewed for completeness and accuracy, and appropriate entries will be made on the cover. The Agriculture Questionnaires will be reviewed on a sample basis as a check on the field supervisor. Incorrect or incomplete work will not generally be returned to the field for correction (decisions and adjustments will be made in the editing operation at the NSO instead). However, if the quality of the work is quite poor, the Technical Assistant will be informed so that he can contact the field supervisor and take appropriate remedial action. In any event, the review in the PCO (TCO) will be kept to a minimum, and the burden of deciding whether or not work is acceptable will be centralized in the NSO, where the necessary specialists would be available. As the work is reviewed, it will be formed into work units and transmitted to the NSO.

- (4) Chapter 4 covers the administrative matters of concern to the office staff such as the confidentiality requirements, work rules, etc.

5.2 *Training and supervision*

Training sessions are scheduled for the census officer and his technical and administrative assistants. These are discussed in chapter 1 of this unit. The calendar of activities (exhibit V-1-5) gives the dates for these sessions.

As has already been mentioned, no general formal training program will be given the office clerical staff. Most of the training will be in the form of on-the-job instruction. Each worker will, of course, study those parts of the manual that apply to his particular job. This will help to reinforce his on-the-job training. He will also use the manual as a reference. The office staff will be under the direct supervision of the Administrative Assistant and will be responsible to him. It will be his responsibility to see that they are properly trained and to assign them to their jobs. He may designate one of the more capable persons as the chief clerk to assist him in these duties.

Several of the office workers will have to be given special training in the field procedures. Present plans are for them to attend one of the enumerator training sessions and to undergo the same training. This is more training than they really need just to review the completed field work; however, it is intended that these people be available to use as enumerators if it becomes necessary to replace one of the regular enumerators.

Although all of the office workers are under the Administrative Assistant according to the organizational chart (see the chart in chapter 1 of this unit), the Technical Assistant may be called upon to organize and supervise the review operation. However, since he will be out of the office at least part of the time visiting the field supervisors, the ultimate responsibility for all of the office workers is assigned to the Administrative Assistant.

Chapter V - 6. EVALUATION PROGRAM

1. INTRODUCTION

There is, unfortunately, a tendency among casual users of census data to accept the data as infallible. More sophisticated users of the data and certainly those involved in gathering the data know that this is not the case. Thus, these people recognize the need for evaluating the accuracy of the census. Such an evaluation can serve two primary purposes:

- (1) It can make the users of the data aware of the fact that errors exist--errors which may affect their decisions based on the census results. It may also give them some idea of the magnitude of these errors.
- (2) It can give the planners and administrators of the census detailed information on the type and size of errors that are being made. Such information will be useful to them in developing improved data-collection and processing techniques for future censuses.

Although the need for evaluating the accuracy of census results is generally recognized by persons active in the field of data collection, the use of evaluation programs is still somewhat restricted and the quality of those programs that have been carried out has not been as high as would be desired. One reason for this is that these programs are relatively new, and procedures so far developed for evaluating census results have been limited in their effectiveness and have been somewhat complicated and quite costly to carry out. This is especially true in the field of agriculture. Furthermore, the technical and financial resources available for carrying out a census are usually strained to the limit just to collect, process, and publish the data; consequently, there are often no resources left for evaluation and research programs. Nevertheless, the possible consequences of errors in census data, particularly where these data are to serve as benchmarks for current programs of esti-

mation and forecasting, are of sufficient importance to warrant making every effort to carry out an evaluation program in conjunction with the census. Agrostan will make that effort.

2. TYPES OF ERRORS PRESENT IN A CENSUS

In defining measurement errors, it is convenient to assume that there exists for each statistic obtained in the census a "true" value. The error in a census statistic is the difference between that statistic and the true value.

2.1 Bias and nonsampling variability

It is useful to divide the measurement error in a complete-enumeration census into two components--bias and nonsampling variability. To do this, we think of the census as a repeatable process of measurement. That is, we assume that we could carry out independent census enumerations with some conditions (such as the form of the questionnaire and written instructions) held constant but with other conditions (such as the particular persons selected as enumerators, the time of day a particular respondent was enumerated, etc.) subject to random fluctuation. For a given statistic such as total land in holdings, each of these repetitions of the census would produce a different value of the statistic. These values would have a mean or expected value. The difference between this mean and the true value is called the bias; the variability of the values of the statistic about this mean is called the nonsampling variability. Thus, the error (that is, the difference between the statistic generated by a particular repetition of the census and the true value) contains both a bias component and a nonsampling variability component.

For national totals, the error attributable to nonsampling variability will probably be negligible compared to the error attributable to bias, since nonsampling variability arises from factors which tend to average out through compensating errors when large numbers of enumerators and/or respondents are involved. For smaller areas, however, this might not be the case.

The preceding discussion was concerned with complete-enumeration censuses. If we are dealing with a sample census (as is the case in Agrostan), sampling variability must also be considered. Nevertheless, when one talks about evaluating the census, one is talking about attempting to measure the bias. Even though we know that the error we detect in a given situation contains components attributable to sampling and nonsampling errors, these cannot be isolated and are assumed to be negligible relative to the bias.

2.2 Coverage error and content error

The bias component of error can be further broken down into (a) coverage error and (b) content error. Coverage error arises from erroneous omission or inclusion of holdings in the census; content errors arise from reporting errors in data collected for holdings properly included in the census. An evaluation program should attempt to measure both types of error. However, the complexities introduced by attempting to measure coverage error may, in some instances, require a country to forego measuring this component or to attempt to measure only a portion of it.

3. RESTRICTIONS OF EVALUATION PROGRAM

The procedures employed in carrying out an evaluation program are dependent upon the nature of the census itself and the resources available for the program. Different countries, and indeed different censuses within the same country, might require very different evaluation programs. All such programs share two important characteristics, however.

- (1) On a unit basis, they are costly. If one expects to obtain data that are more accurate

than those obtained by the census, one must be prepared to pay a higher price. Consequently, the sample size will necessarily not be large enough to estimate errors for small administrative divisions. Generally, only national estimates will be feasible.

- (2) Even though the number of cases or areas involved may be small, the technical resources required to undertake such a program will be considerable. The questionnaires, instructions, and tabulation procedures will, in many respects, be more complex than those used in the census. Difficulties in sample design and estimation may further complicate the situation. Certain concepts underlying the program are more difficult to grasp than are those in the census; certain procedures require greater individual initiative on the part of enumerators, clerks, and technicians than do comparable census procedures. As a result, competence at all levels must be higher for the evaluation program than for the census itself.

Because of these characteristics, an evaluation program must be careful not to attempt to do more than it can reasonably expect to accomplish. In addition to limiting itself to making national estimates (or, at most, estimates for perhaps three or four subdivisions), it must restrict itself to estimating errors for only a few items. These would probably include the total number of holdings, the total amount of land in holdings, and the total amount of cropland harvested. Even to attempt to measure the error in total land for perhaps two or three major crops may be too ambitious, particularly on the first attempt to conduct such a program. Livestock presents even more problems than land and should not be included unless there is some very pressing reason for doing so. The census enumerator obtains the number of livestock on the holding as of the day of enumeration. Because of the mobility of livestock and the fallibility of the holder's memory, the difficulties involved in going out to a holding weeks or even months later and attempting to obtain a more accurate answer than was obtained originally on the day in question are virtually insurmountable. If some sort of evaluation of livestock is desired, some other approach would be much more likely to yield useful results. For example, data on number of sales, purchases, births, deaths, etc. by date of occurrence might be col-

lected on a continuing basis from a panel of holders. An inventory could then be calculated for the date corresponding to the census enumeration date and compared to the corresponding census inventory.

4. GENERAL PROCEDURE

Whenever one attempts to measure the accuracy of something, it is axiomatic that the measuring device must be, if not perfect, then at least more nearly perfect than the item being measured. The same requirement holds for an evaluation program designed to measure the accuracy of the census. The program can never reach perfection; however, to be worth doing it must hold promise of coming closer to the "truth" than does the census itself.

The general procedure of such a program is to collect data by means of a sample survey, to associate units in the sample survey with units in the census, and to compare the figures obtained by the two methods for these corresponding units.¹ On the basis of this sample, the total error in the census is estimated on the presumption that differences between the results of the two procedures represent errors in the census.

Unfortunately, there is no way to establish objectively that this is the case. If one were able to evaluate objectively the evaluation program and thus prove that it was more nearly accurate than the census itself, one would not need an evaluation program. One would apply the objective measurement directly to the census. Justification of the program, therefore, will have to be based on subjective judgment. If one is to claim that the results of the evaluation program more nearly approach the truth than do the results of the census, the program must contain specific features that one can point to as being clearly superior to the corresponding features of the census procedure. If this can be done, then one may reasonably contend

¹If the procedure of associating units allows for the situation in which a unit in the sample survey has no corresponding unit in the census, the unit is said to be missed. The error for this case is calculated from zero. The reverse situation may also be possible.

that, since the methods used were superior, the results must also be superior. The following are some of the things that can be done to assure that the evaluation program satisfies this requirement.

4.1 Use of more detailed questionnaire

By limiting itself to investigating only a few items, an evaluation survey can investigate these items much more thoroughly than can the census. For example, in attempting to determine the total land in the holding, the evaluation questionnaire might ask detailed questions about each separate piece of land comprising the holding. For each piece of rented land, for example, inquiry may be made regarding the ownership of the land, the date when the land was first acquired by the present holder, the arrangements made for the use of the land, etc. Similarly, inquiry about crops may be made for each piece separately rather than for the holding as a whole. Such a detailed investigation should reduce the likelihood that any land will be omitted that should have been included or that any will be included that should have been omitted. It should also increase accuracy by leading the respondent to concentrate on one piece at a time.

4.2 Use of better-qualified enumerators

Since the evaluation program will require fewer enumerators than did the census, the level of quality of those hired should be higher. If census enumerators are used, selection can be made from the better ones. Furthermore, as a result of their census work, they will be more experienced. Some caution should be exercised in using census enumerators, particularly if they are to work in the same area again. They will have to be made to realize that the purpose of the evaluation program is to measure the accuracy of the census as a method of obtaining data and not to check up on individual enumerators. If they are not convinced of this, their work on the evaluation program may be seriously compromised.

4.3 Improved training and supervision

The smaller enumerator staff should allow for better, more intensive training and supervision. Fewer training centers will be required, and these can be conducted by the better trainers. Only the better supervisors need be used, and these, having fewer enumerators to supervise, can maintain much tighter control over the field work.

4.4 Limitation on type of respondent

Better results can usually be achieved if the enumerator is required to obtain the information directly from the person in charge of the agricultural operation. This will require that the enumerator be prepared to make callbacks. As a practical matter, such a restriction cannot be enforced completely; however, the exceptions will be kept to a minimum if the enumerator is required to give the name of the respondent (if someone other than the holder), his connection with the operation, and the reason for not contacting the holder. Such restrictions would not generally be feasible in the census.

4.5 Use of supporting information

Another method of improving the evaluation data is to require the enumerator to complete questionnaires for persons associated with holders in the sample, particularly landlords and tenants. If the information obtained from these people conflicts with that obtained from the holder in the sample, further investigation can be carried out until the enumerator is satisfied that he has the situation reported correctly. For example, if the holder reports renting some land from someone else, then the questionnaire completed for that landlord should, in turn, show that some land was rented out to the holder in question. If the two questionnaires are inconsistent, then the enumerator must investigate further to determine the correct situation.

4.6 Sketching

Requiring the enumerator to sketch the land in the holding on a scale map or, better yet, on a

recent large-scale aerial photograph, can also increase the accuracy of reporting. Each separate piece comprising the holding is outlined on the map or photo. Individual fields or cleared plots within these pieces may also be sketched if desired. A measurement grid can be placed over the sketch to see if the area agrees reasonably well with the reported figure. Generally, sketches cannot be expected to detect small errors. Consequently in areas where holdings are small or comprise small pieces, the usefulness of the procedure is somewhat limited. However, even here sketching can serve to detect readily those cases where more than one holder reports the same land; it can also decrease the likelihood of overlooking land. On the negative side, sketching is difficult for some enumerators; it also can be distracting to the respondent who becomes so engrossed with the sketching process that he fails to concentrate on his answers. Furthermore, it is always time-consuming. Nevertheless, it can be a useful tool and should be utilized when the circumstances are favorable.

4.7 Objective measurements

When the holder simply does not know the facts about his operation, the prospect of obtaining reasonably accurate answers is very poor. No questionnaire, no matter how well constructed or administered, can be expected to elicit facts that the respondent does not know. In such situations, some type of objective measurement must be resorted to if satisfactory data are to be gathered. Although sketching the land does provide some measure of objective control over data provided by the holder, it has shortcomings as has already been pointed out. Consequently, the feasibility of actually surveying tracts or fields should be investigated.

Because of the cost involved, it is not likely that such methods could be used for all units in the sample. Surveying could be done on a subsample of holdings, however, and the results of suitable statistical analysis could be used to adjust the data obtained by other less costly means.

4.8 *Comparison with census results and reconciliation*

After completion of the initial field work on the evaluation program, the data collected are compared to the corresponding census data. If the data agree or if a careful review of the questionnaires and associated forms supports the evaluation data, the reviewer can reasonably accept the latter as being the more nearly correct. However, if the data do not agree and if there is not sufficient evidence to warrant accepting the evaluation data, follow-up steps can be taken either to improve the quality of the evaluation data or to substantiate their claim to accuracy. In the followup program the respondent is contacted again, and attempts are made to clear up the discrepancies. Such a procedure requires a great deal of tact and diplomacy; but with adequate training and skill, it can be done. To be successful, the enumerator must convince the respondent that the purpose is to evaluate the census as a whole, to judge its effectiveness as a means of obtaining information. He must allay any fears the respondent has that the purpose is to check up on him (the respondent) personally.

5. *PUBLICATION OF RESULTS*

Since one of the primary purposes of the evaluation program is to make users of the census data aware of the fact that the data are not completely free of error, it follows that the census publications should include some of the results of the evaluation program together with a general discussion of the program. The amount and kinds of data that should be published depend upon the particular program that has been carried out. As a minimum, the estimated net error in the major items that were investigated should be presented along with estimates of their reliabilities. If the net error can be broken down into various components, a table showing the contribution of each source of error to the net error might be included. An example of this would be a table showing (a) what part of the error was attributable to holdings missed entirely by the census, (b) what part to holdings erroneously included in the census, and

(c) what part to response errors for holdings properly included in the census.

Analytical tables are necessary for persons who are using the data from the evaluation program to devise ways of improving future censuses. Some of these tables may also be included in the published results. For example, if the program included a fairly thorough procedure for measuring coverage errors, a table showing characteristics of holdings missed entirely by the census might be of particular interest to users of the census data, since the distributions of these holdings with respect to such characteristics as size, tenure, type of holding, and the like will probably be quite different from the corresponding distributions of the holdings not missed by the census.

6. *AGROSTAN EVALUATION PROGRAM*

The evaluation program planned for the Agrostan agriculture census will not be discussed in detail. Planning and carrying out an evaluation program is just as difficult and detailed as is planning and carrying out the census itself. In some ways, it is even more so. The program to be carried out will necessarily be modest. The following discussion concerns some of the features of the plan.

6.1 *Restrictions*

Because of the small contribution of the Northern Territory to the total agriculture of Agrostan and the difficulty of enumeration in this area, the evaluation program will be confined to the Provinces. Estimates of errors will be made only for national totals excluding the Northern Territory. The items to be investigated will be limited to the number of holdings, the total land in holdings, and the total land from which temporary crops were harvested or on which permanent crops were grown. Although data will be obtained for other characteristics of the holding or its holder, these data will generally be collected for purposes of analysis rather than for purposes of estimation.

6.2 Investigation of coverage errors

It will not be possible to make a complete investigation of errors in coverage (that is, failure to enumerate all holdings that should have been included in the census). Errors in coverage can be attributed either to (a) failure to list the holding at all on the listing form, or (b) failure to obtain the correct information on the listing form.

6.21 Failure to list holdings.--No attempt will be made to detect coverage errors arising from failure to find holdings in the listing operation. A simple relisting of selected areas could be carried out; but unless the procedure were substantially improved over the census procedure, it is not likely that such an operation would produce results sufficient to justify the expense. If the evaluation enumerator were provided with the census maps and the Listing Book in advance, with instructions merely to see if anything should be added to it, he would probably rely too heavily on the original listing and become careless. On the other hand, if he were required to list the area again without this prior knowledge, the relisting operation would be just as costly as the original listing and probably not a great deal more accurate since any improvement would be achieved only because of having a better qualified and better trained enumerator. In either case, a costly and complicated procedure for matching the two lists would have to be devised followed by a reconciliation operation to resolve discrepancies.

The procedure could be changed perhaps to include a rough sketching operation to account for all the land in the area. Any agricultural land not included on census questionnaires could be investigated further to determine whether or not the holder lives in the area and was missed by the census, but the cost of such an operation with the difficulties involved in sketching (particularly when good maps or aerial photos are not available) would appear to prohibit such an undertaking unless there is reason to believe that the census listing operation was very poor.

6.22 Errors in listing.--Coverage errors arising from errors in the information obtained in the listing operation will be investigated. A sample will be selected from those housing units either listed as vacant or said to have had no agriculture operations in 1971 (NO checked in columns 4 and 5 of the Listing Book). These housing units will be contacted by the evaluation enumerator; questionnaires will be obtained for any agriculture operations uncovered.

A sample will also be selected from those holdings reported in the Listing Book as being less than 1/10 of a hectare in size; a complete questionnaire will be obtained for each of the holdings in this sample. Those which are found to be actually larger than 1/10 of a hectare in size will be counted as missed by the census.

Both of these samples will be fairly small since the holdings found by these methods will not be expected to contribute substantially to the total error for the area items (total area in holding, area in crops) being investigated. The contribution to the error in the number of holdings, on the other hand, may be relatively large; however, since usefulness of this statistic is somewhat doubtful in any case, attempts to assess its accuracy will be limited.

6.23 Other sources of coverage error.--Additional coverage errors of a sort may be uncovered in the investigation of content errors when it is discovered, for example, that an operation that should have been counted as one holding was actually enumerated in the census as two holdings, or vice versa.

6.3 Investigation of content errors

The investigation of content errors (that is, reporting errors for holdings correctly included in the census enumeration) will be based on a sample of holdings from those enumerated in the census. Content errors may be thought of as arising from two major sources.

- (1) Failure to properly define the holding (that is, omission of tracts that should have been included, or vice versa).
- (2) Failure to give the correct figures for tracts that are correctly included as part of the holding.

6.31 Definition of holding.--In general, the concepts underlying the determination of whether or not a particular piece of land should be reported by a particular holder will be the same for the evaluation survey as they were for the census. However, the holding in the evaluation survey will be defined with reference to a particular date rather than the date of enumeration as was the case with the census. This is done so that one can conceive of a universe of evaluation survey holdings in which all agriculture land is covered and no land is included in more than one holding. For convenience, the 31st of December has been chosen as the reference date. Since the bulk of the census enumeration is to be completed by the end of January, discrepancies between the census and the evaluation survey arising from this difference in definition are expected to be negligible. Moreover, such discrepancies can be identified in the reconciliation phase of the program.

6.32 Evaluation procedures for establishing land in holding.--The evaluation procedure for establishing what land should be included in a particular holding will differ from the census procedure in several important ways.

- (1) Rather than simply asking the respondent to report all the land that he owned, rented from others, etc., as of 31 December 1971 and, thereby, tacitly leaving it up to him to decide whether or not he was in charge of a given piece of land on that date, the evaluation survey will inquire about all the land in which he had an interest of any kind at any time during 1971. For each piece of land reported, the respondent will be asked to answer several questions, such as:

"Who owns this land?"

"When did you take over this land?"

"Did you still own (rent) this land on 31 December 1971?"

"Did anyone else use this land in 1971 after you gave it up?"

"Will you be using this land again during the 1972 crop season?"

"Did you rent any of this land to others in 1971?"

"Was any of this land worked on shares for you by others in 1971?"

"Was this person still renting this land (working this land on shares) on 31 December 1971?"

"Did you or anyone else make use of this land in 1971 after this person gave it up?"

"Who will be using this land during the 1972 crop season?"

- (2) As a check on the accuracy of information given by the respondent, the enumerator will contact persons associated with this holding (landlords, tenants, partners, etc.) and complete questionnaires for their operations as well. If the information obtained from these sources contradicts that received from the original respondent, the enumerator will continue his investigation in an attempt to get as accurate information as possible.

The evaluation survey procedures of intensive questioning concentrating on one parcel at a time and of obtaining supporting information from related persons are intended to increase accuracy in reporting certain types of situations in which the potential for erroneous omission or inclusion of entire tracts is thought to be especially likely. The following are examples of such situations.

Some landlords have a tendency to think that they should report for all the land they own even though part of it may be rented out to someone else. Although the format of the census questionnaire is intended to prevent this sort of error (and probably does limit its occurrence), there is reason to suspect that some respondents do not feel obligated to report in accordance with census concepts when such concepts are contrary to their own. It is believed that the evaluation procedures will be more effective than the census procedure in forestalling this type of reporting error.

Rental arrangements (or other arrangements made for the use of land) are often quite informal with no specific dates being agreed upon for taking over land or for giving it up. Consequently, during the period between the end of one crop season and the start of the next crop season, it is often not clear who is in charge of the land.

Ordinarily, this does not cause any problem for the owner or renter since the land is not being used anyway; presumably, at some time during the winter, they will either renew their agreement for another season or the owner will make some other arrangement. However, it does create a problem when they are approached by a census enumerator in January and asked to report on all the land that they control. The result is that some land is reported more than once and some omitted entirely. In the evaluation survey, the burden of decision is transferred from the respondent (who does not really know or care who is technically in charge at this time of the year) to the enumerator (who, on the basis of the information obtained by questions such as those cited above, can determine by rule who is technically in charge). The rules adopted will lead to a unique assignment of the land in question; moreover, the decision will be consistent with the census concepts relating to this situation.

A holder who has definitely given up land late in the year may feel that he should report it to the census enumerator anyway even though the questions ask only for land he is in control of on the day in question; or he may omit the land but include the crops harvested from it since they were his crops. Conversely, he may have acquired land late in the year and either not reported it or reported the land but not the crops since he did not harvest them. Asking about all the land in which the holder had an interest at any time during 1971 in the evaluation survey, not only reduces these types of errors but also provides information which can be used in the reconciliation operation to satisfactorily explain discrepancies without having to carry out field followup for this case.

6.33 Evaluation procedure for reducing other content errors.---Content errors arising from reporting incorrect figures for tracts correctly included as part of the holding must also be reduced if the results obtained by the evaluation survey are to be superior to the results obtained by the census. The evaluation survey will attempt to achieve this goal in two ways.

- (1) Information on the uses made of the land will be obtained separately for each tract comprising the holding. Furthermore, if the tract is subdivided into fields or plots, each field or plot will be discussed separately as well. Every effort will be made to get the best possible data for cropland with proper allowance made for wasteland, waterways, uncleared areas, and the like. Special attention will be given to obtaining accurate information about interplanting, succession cropping, crop failure, etc.
- (2) Objective measurement of area will be carried out on a subsample basis. A sample of holdings enumerated in the evaluation survey and a subsample of the tracts comprising these holdings will be selected for measurement. This sample will be as large as possible consistent with the resources available. A final decision is being delayed in order to see if, after the completion of the census enumeration, additional funds may become available for the evaluation program.

Sketching will not be done because of the unavailability of detailed maps or aerial photographs. Objective area measurement will be carried out on a subsample of the holdings in the evaluation program.

6.4 *Timing*

The evaluation program will be started as soon as possible after the completion of the census since the longer it is delayed the more difficult it will be to carry it out and the less reliable will be the results. Much of the preliminary work can be completed before the census is finished, including all of the planning, most of the preparation of the materials and instruction and the selection of the districts and PSU's to be included in the program. Selection of trainers, supervisors, and enumerators can also be done at least tentatively. As soon as the census is completed in one of the PSU's concerned and the material is returned to the NSO, the sample of holdings can be selected from the Listing Form (A-2a). The sample from the National Certainty Listings can be selected as soon as the enumeration of National Certainty holdings is complete in the district; since the district supervisor may have added to the original list, this sample will have to be selected from his master copy which will not be returned to the NSO until then. Final selection

and training of the field staff will have to await completion of the entire census, however, since many of the better enumerators (those who will be desired for the evaluation program) will probably be assigned to do clean-up work on the census and, thus, will be the last to finish. A target date of 15 April has been set.

6.5 Staffing

Because of the complexity of the evaluation program, all office work will be done in the NSO. The best possible office staff will be organized and assigned specifically to the evaluation program. Their duties will include drawing the sample, checking in the field work and editing it, and performing preliminary steps in the matching operation. Although there may be periods when it will be necessary to assign them to other duties in order to keep them busy, they should be kept readily available when needed again by the evaluation program. The processing of the evaluation data requires much more individual judgment and initiative than does the usual office operation. It has about it an aura of uncertainty, of groping for the truth amidst a sometimes overwhelming array of conflicting data that cannot be dispelled by even the most detailed instructions. Consequently, the clerks, and especially the technicians, not only must be of high quality but also must be given the opportunity to become thoroughly familiar with the forms used and concepts behind the program before the really

difficult part of their job is reached. The technicians' most difficult responsibility will be that of deciding, when the data do not agree, whether to accept the evaluation data or to send the case back for followup. If at all possible, these individuals should have some agricultural background and should become involved in the field work as supervisors in order to prepare them for this job. To a large extent the field work will be controlled directly out of the NSO as well. The supervisors will be trained at the NSO office by the person in charge of the program. The supervisory staff will consist of the technicians supplemented as necessary by the better census supervisors. One supervisor will be needed in each Province.

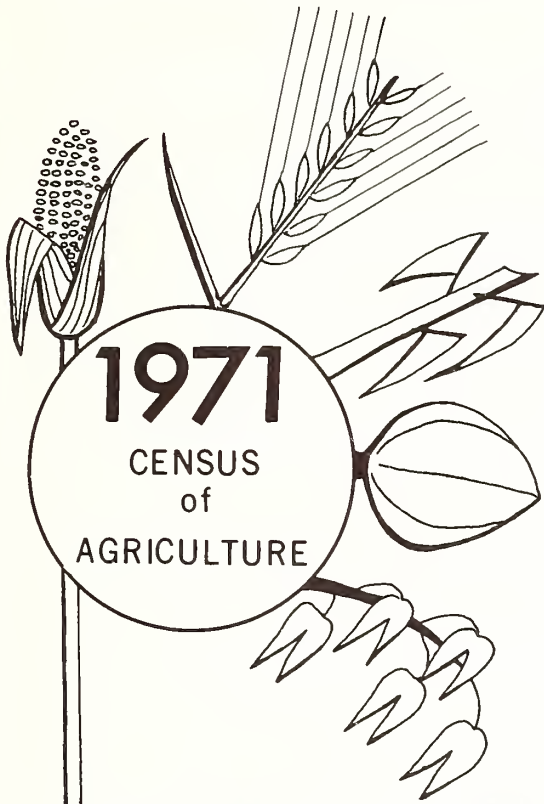
The enumerators will be recruited from the better census enumerators. Joint training schools will be conducted involving perhaps three supervisors and their enumerators. The training and field supervision will be carried out in much the same manner as was done in the census. The supervisors will make repeated visits to the enumerators to observe their performances, review their work, and correct their errors. A supervisor may have fewer enumerators, but he will have a larger territory to cover; consequently, the number of visits may be less than were possible in the census. Provisions for providing supplies and collecting completed work will be similar to the census procedure except that contact will be made directly with the NSO.

APPENDIX

(Exhibits for Unit V are arranged in sequence by chapter number; reference exhibits from other units follow in numerical order. Titles of the exhibits are listed in the table of contents)

(To be posted or announced by radio or newspaper; if posted, would be printed in color)

IN _____ ON _____
(place) (date)



(Employee's signature)

Exhibit V-1-2. APPLICATION AND PERSONNEL FORM FOR TEMPORARY FIELD SERVICE, FORM A-200

(Forms would be prepared in sets of white, yellow, and pink copies)

Form A-200 (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE		Appointed for 1971 Census of Agriculture																																	
APPLICATION AND PERSONNEL FORM FOR FIELD SERVICE 1971 CENSUS OF AGRICULTURE																																					
INSTRUCTIONS – This form will be used only for employees for major censuses. Appointments may not exceed 6 months. All entries, except signatures, must be made by typewriter or printed with heavy pressure by ballpoint pen. All copies must be legible.																																					
Part A – APPLICATION (To be completed by applicant)			Part B – NOTICE OF PERSONNEL ACTION (To be completed by supervisor)																																		
1. Name (Surname – given name) PLEASE PRINT			19. Temporary appointment: <input type="checkbox"/> Enumerator <input type="checkbox"/> Office worker <input type="checkbox"/> Supervisor <input type="checkbox"/> Other (Rate of pay shown in item 25)																																		
2. Home address (Road, city or hamlet, or other description of location, District)		3. Province	This appointment is subject to conditions outlined below. It may be terminated at any time within 6 months. It may be terminated without further written notice at the close of the last day you are assigned to duty.																																		
4. Date of birth (Day, month, year)		5. Telephone No.																																			
6. Have you had previous civilian government service? <input type="checkbox"/> Yes → { Agency _____ <input type="checkbox"/> No { Dates of service from _____ to _____			20. APPOINTMENT AUTHORITY: Amendment 1(1953), Census and Statistics Act of 1948																																		
Answer by placing "X" in appropriate column			21. AGENCY CODE: NSO(068) Ministry of Economy																																		
7. Are you a citizen of Agrostan? If No, give country of which you are a citizen. _____			22. Place of work: Province _____ District _____ City (If applicable) _____																																		
8. Do you now have any physical defect or disability? If Yes, explain in item 17.			23. Effective date of appointment: Day, month, year _____																																		
9. Are you now employed? If Yes, give name of employer, type of work, hours of work, salary, etc. in item 17.			24. Compensation from: 1971 Census of Agriculture																																		
10. Have you ever been discharged (fired) from a job, or have you quit after being informed that your employer intended to discharge (fire) you? If Yes, give in item 17 the name and address of employer, date, and reason in each case.			25. Remarks and salary rates – Insert rates of pay appropriate for the type of appointment indicated in item 19.																																		
11. Have you been arrested since your 16th birthday? If Yes, give in item 17 the date, charge, place, and action taken in each case.			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 20%;">Rates</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> a. Enumerator</td> <td></td> </tr> <tr> <td>(1) Training (fee)</td> <td></td> </tr> <tr> <td>(2) PSU listing (each)</td> <td></td> </tr> <tr> <td>(3) PSU enumeration (each)</td> <td></td> </tr> <tr> <td>(4) National Certainty enumeration (each)</td> <td></td> </tr> <tr> <td>(5) Travel (fee)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> b. Supervisor</td> <td></td> </tr> <tr> <td>(1) Daily salary</td> <td></td> </tr> <tr> <td>(2) Travel (per kilometer)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> c. Office workers</td> <td></td> </tr> <tr> <td>(1) Daily salary</td> <td></td> </tr> <tr> <td>(2) Travel (If applicable)</td> <td></td> </tr> <tr> <td><input type="checkbox"/> d. Other – Specify duties and rates</td> <td></td> </tr> <tr> <td>(1) _____</td> <td></td> </tr> <tr> <td>(2) _____</td> <td></td> </tr> </tbody> </table>				Rates	<input type="checkbox"/> a. Enumerator		(1) Training (fee)		(2) PSU listing (each)		(3) PSU enumeration (each)		(4) National Certainty enumeration (each)		(5) Travel (fee)		<input type="checkbox"/> b. Supervisor		(1) Daily salary		(2) Travel (per kilometer)		<input type="checkbox"/> c. Office workers		(1) Daily salary		(2) Travel (If applicable)		<input type="checkbox"/> d. Other – Specify duties and rates		(1) _____		(2) _____	
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12a. Are you now, or were you in the past, an operator, a family worker, or a hired worker on an agricultural holding? b. Have you had any previous experience working in an office? If Yes to a or b above, give details. _____			26. Appointing officer's signature _____ Date _____																																		
13. Are you willing to work full days, 6 days a week? If No, explain. _____			Part C – OATH AND APPOINTMENT AFFIDAVITS																																		
14. Do you understand that this work must be done during a specified period, not when you want to do it?			27. I have read the Oath and Appointment Affidavits and I hereby swear (or affirm) to them as prescribed by the National Statistical Office.																																		
15. Education – Circle highest year completed. <table style="width: 100%; text-align: center;"> <tr> <td colspan="8">Elementary</td> <td colspan="4">Secondary</td> <td colspan="4">University</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td> <td>9</td><td>10</td><td>11</td><td>12</td> <td>13</td><td>14</td><td>15</td><td>16</td> </tr> </table>			Elementary								Secondary				University				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Appointee's signature _____		
Elementary								Secondary				University																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																						
16. Indicate your knowledge of languages or dialects by entering "E" for excellent, "G" for good, or "F" for fair opposite each. <table style="width: 100%; text-align: center;"> <tr> <th>Language or dialect</th> <th>Reading</th> <th>Speaking</th> <th>Understanding</th> <th>Writing</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>			Language or dialect	Reading	Speaking	Understanding	Writing																28. (To be completed by person administering oath) Subscribed and sworn (or affirmed) before me this _____ day of _____ 19__ A.D. at _____ (Place) _____ (Province) Officer's signature _____ Title _____ I have been designated to administer oaths under Section _____, Act of _____														
Language or dialect	Reading	Speaking	Understanding	Writing																																	
17. Remarks			18. I certify that the statements made in this application are true to the best of my knowledge and belief. Applicant's signature _____ Date _____																																		

Personnel folder (White) Employee (Yellow) NSO payroll (Pink) U.S. DEPARTMENT OF COMMERCE – BUREAU OF THE CENSUS

Exhibit V-1-3. ENUMERATOR SELECTION AID, FORM A-201

Form A-201 (AGROSTAN) (March 1971)	MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE		DO NOT USE	
ENUMERATOR SELECTION AID 1971 CENSUS OF AGRICULTURE		Number right		
		Parts I and II		
		Parts III and IV		
A. Name (Surname – given name) Please PRINT		C. Year of birth		
B. Address		D. Date of test		

GENERAL INSTRUCTIONS

This test contains questions on map reading, arithmetic, and vocabulary. The questions need not be answered in order. Answer first those that you can without delay. Then go back and answer those questions you passed over. Give an answer to all questions even though you are not sure your answer is correct. A perfect score is not required in order to be eligible.

There are two ways to answer questions on this test. The first is to put your answer in the space provided. For example:

I. Multiply 4×7 :

Answer 28

The correct answer is **28**, and is written in the space provided.

The second way to give an answer is to select the letter which represents the correct answer and enter that letter in the space provided. For example, you are instructed to select the word which means the same as the word in capital letters.

II. The National Statistical Office will HIRE people to take the Census of Agriculture:

- A – help
- B – train
- C – employ
- D – want
- E – allow

Answer C

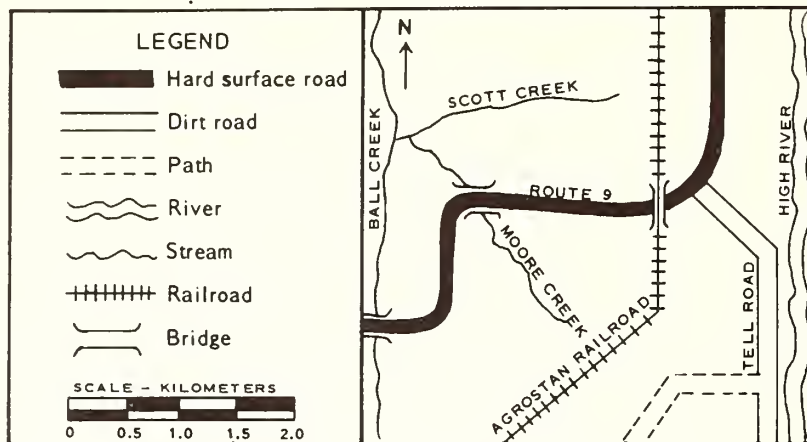
The correct answer for this question is **employ**, represented by the letter “C.” You should enter “C” in the answer space.

TIME ALLOWED – 90 Minutes

Exhibit V-1-3. ENUMERATOR SELECTION AID, FORM A-201--Continued

Part I - MAP READING

Read each question carefully and enter your answer in the space provided (or on the map as instructed).



1. What natural feature follows the eastern border of the map? Answer_____
2. What is the straight-line distance (to the nearest whole kilometer) from the bridge over Moore Creek to the intersection of Route 9 and Tell Road? (Use scale and pencil or other straight edge to measure distance.) Answer_____
3. How many bridges are within 1 kilometer of the western border of the map? (Use scale and pencil or other straight edge to measure distance.) Answer_____
4. What is the straight-line distance (to the nearest whole kilometer) from the eastern end of Scott Creek to the railroad bridge over Route 9? (Use scale and pencil or other straight edge to measure distance.) Answer_____
5. On the map above, draw arrows (→) to indicate the direction of travel you would take if you walked south on Tell Road from Route 9, then turned west onto the path and followed it to edge of the map Answer On map

Exhibit V-1-3. ENUMERATOR SELECTION AID, FORM A-201--Continued

Part II - ARITHMETIC

Read each question carefully and enter your answer in the space provided.

6. A respondent says he owns $3\frac{3}{10}$ hectares of land, rents $1\frac{6}{10}$ hectares from a neighbor, and uses $\frac{7}{10}$ of a hectare that is assigned to him by the community. Assuming he uses all this land, what is the total amount he uses? Answer _____
7. A respondent tells you he owned $6\frac{3}{10}$ hectares of land, but he purchased an additional $4\frac{6}{10}$ hectares. He later sold $3\frac{5}{10}$ hectares. How many hectares does he own now? Answer _____
8. A respondent reports his sales from crops were \$2740 and sales from livestock were \$1760. Which one of the following categories would you check for the sale of all agricultural products?
- A - Over \$6000
 B - \$5000 to \$5999
 C - \$2500 to \$4999
 D - Less than \$2500 Answer _____
9. A respondent says he sold 40 quintals of rice which was one-fourth the total amount harvested. What was the total amount harvested? Answer _____
10. Subtract $\begin{array}{r} 3287 \\ -194 \\ \hline \end{array}$

Answer _____

12. Add $\begin{array}{r} 427 \\ 212 \\ 74 \\ \hline 129 \end{array}$

Answer _____
11. Multiply 37×83

Answer _____

13. Divide 672 by 168

Answer _____

SPACE FOR CALCULATIONS

*Exhibit V-1-3. ENUMERATOR SELECTION AID, FORM A-201--Continued***Part III – VOCABULARY**

For each question choose the one answer which BEST fits the meaning of the word in capital letters; then mark the letter which corresponds to your answer in the space provided.

14. Do not PERMIT anyone but NSO employees to see the completed census forms.

- A – forbid
- B – encourage
- C – allow
- D – command
- E – require

Answer _____

15. Census information remains CONFIDENTIAL.

- A – essential
- B – important
- C – interesting
- D – reliable
- E – secret

Answer _____

16. He was RELUCTANT to answer the question.

- A – unable
- B – unwilling
- C – unqualified
- D – anxious
- E – pleased

Answer _____

17. John gets \$20 a week in WAGES

- A – pay
- B – rent
- C – interest
- D – dividends
- E – bonds

Answer _____

Part IV – READING

Questions 18 and 19 refer to the following statement.

The phrase “keep livestock” refers to all livestock and poultry on a holding (at the time of enumeration) regardless of ownership. It also includes livestock owned by the holder if they are on common or public grazing land.

Following this rule, should you include the livestock for the situations given below? Write “yes” or “no” in the answer space provided.

18. Mr. Ali says there are 20 sheep on his holding but they are owned by his neighbor. Should you include the sheep on Mr. Ali’s holding? Answer _____

19. Mr. Wong tells you he has 10 cows on his holding and 12 cows on common grazing land. Should you report all 22 cows on Mr. Wong’s holding? Answer _____

20. Family income includes all income received by the head of household and all persons living in his household who are related to him. Income refers to gross cash income from all sources, before deductions for taxes etc.

Which of the following is NOT considered as family income?

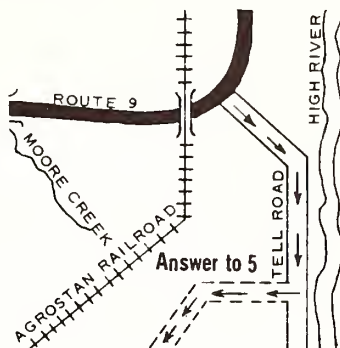
- A – Cash received by head of household for sale of livestock.
- B – Wages received by son of head for working after school.
- C – Cash rent received for rent of 4 hectares of land.
- D – Salary received by unrelated lodger who works as a teacher.
- E – Monthly pension payments to head of household’s father.

Answer _____

*Exhibit V-1-4. ANSWER KEY TO ENUMERATOR SELECTION AID, FORM A-202*Form A-202 (AGROSTAN)
(March 1971)MINISTRY OF ECONOMY
NATIONAL STATISTICAL OFFICE**ANSWER KEY TO ENUMERATOR
SELECTION AID (Form A-201)
1971 CENSUS OF AGRICULTURE**

INSTRUCTIONS TO EXAMINER – If the applicant clearly indicates by his answer in the booklet that he knows the correct answer even though he expresses it in some way other than shown in the scoring key, mark the question correct. Persons failing to earn at least the minimum score are rated ineligible.

- Part I :**
- 1 – River (High River)
 - 2 – 2 kilometers
 - 3 – 2
 - 4 – 1 kilometer
 - 5 – on map →



- Part II :**
- 6 – 5-6/10 (5.6 or 5-3/5)
 - 7 – 7-4/10 (7.4 or 7-2/5)
 - 8 – C
 - 9 – 160 quintals
 - 10 – 3093
 - 11 – 3071
 - 12 – 842
 - 13 – 4

- Part III :**
- 14 – C
 - 15 – E
 - 16 – B
 - 17 – A

- Part IV :**
- 18 – Yes
 - 19 – Yes
 - 20 – D

Exhibit V-1-5. CALENDAR OF FIELD ACTIVITIES

(Applies to Provinces only; for the Northern Territory, timing and content should be adjusted accordingly)

Activity		Week beginning--																																		
		1971														1972																				
		October				November					December					January				February				March				April				May				
		4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	6	13	20	27	3	10	17	24	1	8	15	22	29
ORGANIZATION OF FIELD OFFICES	Hire Province Census Officers ¹																																			
	Arrange for training of Province Census Officers.....																																			
	Hire technical and administrative assistants ¹																																			
	Train Province Census Officers (Calicut) ..																																			
	Technical and administrative assistants enter on duty.....																																			
	Final arrangements for office space, furniture, and equipment ²																																			
	Establish PCO's																																			
	Recruit and hire office staff ³																																			
	Train technical and administrative assistants (Calicut and Ancash)																																			
	Receipt of field materials.....																																			
	Recruit and hire field supervisors																																			
	PCO reports to NSO on recruitment.....																																			
PREPARATORY FIELD OPERATIONS	Prepare for first stage of field supervisor training.....																																			
	Train field supervisors (in PCO), covering preliminary field work.....																																			
	Supervisors carry out preliminary field work (arrange for training space, hire enumerators, review maps, spot NC holdings, subdivide designated PSU's) ..																																			
	Prepare for second stage of field supervisor training.....																																			
	Train field supervisors (in PCO), covering supervision of enumeration....																																			
	Prepare for enumerator training																																			
	Train enumerators (in districts).....																																			
	Distribute enumerator materials																																			
	Field supervisors arrange schedule of visits to enumerators.....																																			
	Census enumeration.....																																			
	Field supervisors observe and review enumerator's work																																			
	Field supervisors prepare progress reports for PCO.....																																			
ENUMERATION	Technical assistants visit field supervisors.....																																			
	Field supervisors transmit completed work to PCO																																			
	PCO reviews completed work																																			
	PCO prepares progress and cost reports..																																			
	PCO transmits completed Work Units to NSO.....																																			
	Close-out operations																																			
Evaluation Survey.....																																				

¹ Recruitment would start as early as 1 August.² Arrangements for office space, furniture, and equipment would have been started as early as 1 June.³ Chief clerk to be hired during week of 1 November and to be on duty during week of 8 November.

NOTE: Activities affecting field operations prior to opening the PCO's are not reflected in this calendar; for example, preparation of enumeration manuals, conducting the pretest, developing publicity materials, compiling list of NC holdings, etc. (See also Calendar of Major Census Activities, exhibit II-2-1, which is included as a reference exhibit in Unit V.)

Exhibit V-1-6. LABEL FOR ENUMERATOR PORTFOLIO, FORM A-106

(To be affixed to a cardboard folio which would contain the enumerator's materials and supplies and would serve as a writing surface)

Form A-106
(June 1971)

MINISTRY OF ECONOMY
NATIONAL STATISTICAL OFFICE



AGROSTAN

1971 CENSUS OF AGRICULTURE

ENUMERATOR PORTFOLIO

Province or Zone	District
-----	-----
(Nome) (Code)	(Nome) (Code)

Nome of enumerator		
Address		
Telephone number		
Appointments with supervisor:		
<i>Date</i>	<i>Time</i>	<i>Place</i>

NOTICE TO FINDER: This Portfolio is the property of the Agrostan Government. If lost or mislaid, please return to Enumerator named above or take to nearest post office.

Appendix

Exhibit V-2-1. DRAFT FORMAT OF SELECTED PORTIONS OF AGRICULTURE QUESTIONNAIRE, FORM A-1a

Example 1. Question on cereals
harvested last year

A. WERE ANY CEREALS SUCH AS (read list below) HARVESTED LAST YEAR?

☐ Yes (Ask (1) and (2))

☐ No (Skip to B)

	(1) Hectares	(2) Production
18. Wheat.....		
19. Rice.....		
20. Sorghum.....		
21. Maize.....		
22. Barley.....		
23. Other (Specify).....		

Example 2. Question on land area in
succession crops

84. WERE ANY OF THE TEMPORARY AND PERMANENT CROPS WHICH YOU
JUST TOLD ME ABOUT GROWN IN SUCCESSION?

☐ Yes

☐ No

(a) (If "yes") HOW MUCH LAND AREA WAS USED TO GROW THESE
SUCCESSION CROPS?

(hectares)

(b) WHICH CROPS WERE GROWN IN SUCCESSION AND HOW MUCH
AREA DID YOU REPORT FOR EACH OF THESE CROPS?

Crop	Area

Example 3. Questions on cattle
and sheep

92. HOW MANY CATTLE OF ALL AGES ARE NOW ON THIS HOLDING?.._____

93. HOW MANY ARE COWS AND HEIFERS THAT HAVE CALVED?....._____

94. HOW MANY ARE CALVES UNDER 1 YEAR OF AGE?....._____

95. HOW MANY ARE HEIFERS 1 YEAR OLD AND OVER WHICH HAVE
NOT YET CALVED?....._____

96. HOW MANY ARE MALES 1 YEAR OLD AND OVER?....._____

97. ARE THERE NOW ANY SHEEP AND LAMBS ON THIS HOLDING?

☐ Yes

☐ No

If "yes"--

98. HOW MANY ARE LAMBS UNDER 1 YEAR OF AGE?....._____

99. HOW MANY ARE EWES AND EWE LAMBS 1 YEAR OLD AND OVER?.._____

100. HOW MANY ARE RAMS AND WETHERS 1 YEAR OLD AND OVER?...._____

Exhibit V-2-2. FINAL FORMAT OF SELECTED PORTIONS OF AGRICULTURE QUESTIONNAIRE, FORM A-1a

Example 1. Question on cereals harvested last year

CEREALS FOR GRAIN		a. How much area was harvested?		b. What was the total production?			
Were any of the following cereals harvested for GRAIN -		Area	Quantity	Unit (Mark X or specify other)			
				Metric tons	Quintals	Kilograms	Other (Specify)
18. Wheat?	<input type="checkbox"/>	/10	/10	1	2	3	
19. Rice - paddy and upland? (Report production in rough)	<input type="checkbox"/>	/10	/10	1	2	3	
20. Sorghum?	<input type="checkbox"/>	/10	/10	1	2	3	
21. Maize (corn)?	<input type="checkbox"/>	/10	/10	1	2	3	
22. Barley?	<input type="checkbox"/>	/10	/10	1	2	3	
24. Other cereals for grain - millet, oats, rye, etc.? (Specify)	<input type="checkbox"/>	/10	/10	1	2	3	
<input type="checkbox"/> NONE (NO for 18 through 24)		TOTAL			/10		

Example 2. Question on land area in succession crops

SUCCESSION CROPS	
84. Of all the temporary and permanent crops reported (in Sections III and IV), were any harvested in succession on the same land last year, 1971? (Report each crop separately. For example, if rice was harvested on 2 hectares of land, followed by a second crop of rice on the same land, report "rice" as the first crop in 84a; report "rice" as the second crop in 84a and "2 hectares" in 84b on the line for "second crop" - assuming "hectare" as the unit of measure.)	
<input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to Section VI)	
a. Which were the succession crops?	b. How much area was planted in each crop?
	Area
First crop	/10
Second crop	/10
Third crop	/10
First crop	/10
Second crop	/10
Third crop	/10
First crop	/10
Second crop	/10
Third crop	/10
TOTAL	
Greatest number in succession	
c.	

Example 3. Questions on cattle and sheep

Are there any of the following animals now on this holding, or on communal grazing land -		a. How many?
92. Cattle and calves, including oxen - all ages? <input type="checkbox"/> YES		
(Total of (1) to (5) should equal 92)		
(1) Cows and heifers that have calved?		
(2) Heifers 1 year or older that have not yet calved? ..		
(3) Female calves under 1 year old?		
(4) Male cattle 1 year or older?		
(5) Male calves under 1 year old?		
93. Sheep and lambs - all ages? <input type="checkbox"/>		
(Total of (1) to (3) should equal 93)		
(1) Lambs under 1 year old?		
(2) Ewes and ewe lambs 1 year or older?		
(3) Male sheep 1 year or older?		

Exhibit V-2-3. LIST OF FIELD-USE FORMS AND MANUALS

<u>Form No.</u>	<u>Title</u>	<u>Description</u>
A-1a	1971 Census of Agriculture Questionnaire (Provinces)	Agriculture Questionnaire to be filled for a sample of holdings in the Provinces.
A-1b	1971 Census of Agriculture Questionnaire (Northern Territory)	Agriculture Questionnaire to be filled for a sample of holdings in the Northern Territory.
A-1c	1971 Census of Agriculture Questionnaire (Provinces - National Certainty)	Agriculture Questionnaire to be filled for all the National Certainty holdings in the Provinces; adaptation of Form A-1a.
A-1d	1971 Census of Agriculture Questionnaire (Northern Territory - National Certainty)	Agriculture Questionnaire to be filled for all the National Certainty holdings in the Northern Territory; adaptation of Form A-1b.
A-2a	Listing Book (Provinces)	Form used by the enumerators for listing all the holdings in a sample PSU in the Provinces; the listing constitutes the frame from which a sample of holdings is selected for the Agriculture Questionnaire.
A-2b	Listing Book (Northern Territory)	Form used by the enumerators for listing all the holdings in a sample PSU in the Northern Territory; the listing constitutes the frame from which a sample of holdings is selected for the Agriculture Questionnaire.
A-2c	National Certainty Listing (Provinces)	Form used by the district agricultural agents to compile a list of National Certainty holdings in the Provinces (holdings of 500 hectares or more and holdings with specialized agricultural operations). Form will also be used as the control form indicating to whom the holding was assigned, date assigned, date completed, date transmitted to the PCO, etc.
A-2d	National Certainty Listing (Northern Territory)	Form used by the marshals to compile a list of National Certainty holdings in the Northern Territory; similar to Form A-2c. Form will also be used as a control form indicating to whom the holding was assigned, date assigned, date transmitted to the TCO, etc.
A-3	List of 1961 Large Holdings (Provinces)	List of large holdings reported in the 1961 Sample Census of Agriculture; prepared by the NSO and sent to the district agricultural agents as a source for compiling the list of large holdings for the 1971 census.
A-250(L)	Instructions for Compiling List of National Certainty holdings (Provinces)	Instructions to district agricultural agents on how to compile the list of National Certainty holdings in the Provinces, and how to fill Form A-2c.
A-251(L)	Instructions for Compiling List of National Certainty holdings (Northern Territory)	Instructions to marshals on how to compile the list of National Certainty holdings in the Northern Territory, and how to fill Form A-2d.
A-121	Observation and Review of Listing (Provinces)	Form used by the district supervisor in the Provinces to record the results of his observation or review of the enumerator's listing. Each form has space to record the results of five visits.
A-122	Observation and Review of Agriculture Questionnaire (Provinces)	Form used by the district supervisor in the Provinces to record the results of his observation of the enumerator when he fills an Agriculture Questionnaire or his review of the completed form. Each form has space to record the results for several households. A separate form is filled at each visit.

Exhibit V-2-3. LIST OF FIELD-USE FORMS AND MANUALS--Continued

<u>Form No.</u>	<u>Title</u>	<u>Description</u>
A-123	Observation and Review (Northern Territory)	Form used by the territorial supervisor in the Northern Territory to record the results of observing or reviewing the enumerator's work. The one form combines the results of observation and review of both the listing operation and the filling of the Agriculture Questionnaires. A separate form is filled at each visit.
A-100	Field Supervisor's Master Control of PSU's	Control form used by the district supervisor or the territorial supervisor to account for all the PSU's assigned to him--to whom they were assigned, date assigned, date completed, etc.
A-101	Problem Referral	Form used by the field or central office personnel to ask or answer questions, or to describe the handling of specific problems.
A-102	Field Transmittal	Form accompanying the transmittal of materials. Same form is used for transmitting materials between the NSO and the PCO (or TCO) and between the PCO (or TCO) and the supervisors.
A-103	Field Supervisor's Record Book	Booklet used by the district supervisor or territorial supervisor to record enumerator assignments; time, place, and purpose of appointments; pay authorizations issued; and dates of visits to enumerators. Used also by the supervisor to record days worked and kilometers traveled.
A-104	Field Weekly Progress Report	Form used by the district supervisor, territorial supervisor, PCO, or TCO to report the status and progress of the enumeration. Used also by the PCO (or TCO) to summarize field enumeration and field office costs.
A-105	Pay Authorization	Form used to authorize payment for work completed by the enumerator and the field supervisor; payment to be disbursed by the District Office of the Ministry of Economy.
A-106	Label for Enumerator Portfolio	Label to be affixed to a cardboard portfolio which would hold the enumerator's assignment (Listing Book, supply of A-1 Questionnaires, map) and would serve as a writing surface.
A-107	Notice of training	Form used by the field supervisor to notify successful enumerator applicants of the time and place to report for enumerator training.
A-150	PCO (TCO) Master Control of PSU's	Form used by the PCO (or TCO) to list all the sample PSU's in a Province (or Northern Territory); indicates to whom the PSU was assigned, date assigned, date completed, date received and approved, date sent to the NSO; the Work Unit No.; etc.
A-151	Enumerator Payroll Register	Register used by the PCO (or TCO) to record each payment authorized to the enumerators for training, travel, listing, and filling Agriculture Questionnaires; register provides a control by PSU. Same form is used by the NSO to record enumerator payments.
A-152	Supervisor Payroll Register	Form similar to A-151, used by the PCO (or TCO) to record payments authorized to the field supervisors for weekly salary and travel. Same form is used by the NSO to record payments to supervisors.

Exhibit V-2-3. LIST OF FIELD-USE FORMS AND MANUALS--Continued

<u>Form No.</u>	<u>Title</u>	<u>Description</u>
A-50	Enumerator's Reference Manual (Provinces)	Manual of instructions on enumeration procedures, and definitions and explanations of concepts used in the census in the Provinces; to be used as a reference source by the enumerators in the Provinces.
A-51	Enumerator's Reference Manual (Northern Territory)	Manual similar to A-50, except that it pertains to the enumeration in the Northern Territory.
A-60	Field Supervisor's Manual (Provinces)	Manual of procedures and instructions to be followed by the field supervisors in the Provinces.
A-61	Field Supervisor's Manual (Northern Territory)	Manual similar to A-60, except that it pertains to field supervision in the Northern Territory.
A-70	Manual for Province Office	Manual of instructions and procedures for the PCO administrative and clerical staff.
A-71	Manual for Territorial Office	Manual similar to A-70, except that it pertains to the TCO staff in the Northern Territory.

Exhibit V-2-4. LISTING BOOK (PROVINCES), FORM A-2a

MINISTRY OF ECONOMY National Statistical Office		LISTING BOOK (Provinces)		1971 CENSUS OF AGRICULTURE	
CONFIDENTIAL — This inquiry is required by law. All information will be held strictly confidential.					
NOTES					

a. Province name	Code	c. PSU No.							
b. District name	Code	d. Urban place or hamlet name							
FOR ENUMERATOR'S USE									
e. Listing	Date started	Date completed							Number of A-1a Questionnaires
f. Filling A-1a Questionnaires									
g. Enumerator's signature:									
FOR SUPERVISOR'S USE									
h. Number of holdings			Total		PSU total of column —				
			Col. 7	(8)	(9)	(10)	(11)	(12)	
i. On National Certainty Listing Form (A-2c)			Col. 18						
i. Eligible for PSU sample (Line h minus line j)									
k. In PSU sample (A-1a required)									
l. Listing approved and sample selected			Date		Initials		Number of A-1a Questionnaires		
m. Payment for listing authorized									
n. A-1a Questionnaires received and accepted									
o. Payment for A-1a Questionnaires authorized									
p. Supervisor's signature:									
FOR PROVINCE CENSUS OFFICE USE									
q. Listing book (A-1a) checked in									
r. A-1a Questionnaires checked in									
FOR NATIONAL STATISTICAL OFFICE USE									
s. Listing book (A-1a) checked in									
t. A-1a Questionnaires checked in									
u. Weight entered on A-1a Questionnaires									

Exhibit V-2-4. LISTING BOOK (PROVINCES), FORM A-2a--Continued

REMEMINDERS		CROP FOR COLUMN 14																									
<p>Convassing</p> <p>Locate each housing unit within the PSU boundaries. List in systematic order. Follow each road or path to be sure you find all housing units. Indicate direction of travel on the PSU map.</p> <p>Listing</p> <p>List each household on a separate line of the Listing Book, and fill the appropriate columns. If the housing unit is vacant, write VACANT in the space for "Name of head" in column 3; enter "Location of unit" in column 3; and leave columns 4 to 21 blank. When each line is completed, enter "X" in column 22.</p> <p>Collbacks</p> <p>Make return visits when you cannot find a reliable respondent. Keep a record of callbacks in column 22.</p> <p>"None" Entry</p> <p>If "None" for column 13, 14, or 15, enter a dash (-). Do not leave blank.</p> <p>Housing Unit</p> <p>House, hut, tent, room, or group of rooms occupied or intended for occupancy as separate living quarters by a family or other group of persons living together, or by a person living alone.</p> <p>Household</p> <p>The person or group of persons who occupy one housing unit. The household may include nonrelatives (such as lodgers, servants, hired hands).</p> <p>Polygamous Husband</p> <p>Husband with more than one wife. If the wives live with the husband in the same household, list the husband as head; if the wives live in separate households, list the husband with the first-married wife and consider him as the head. Consider the husband as the holder if he grows any crops or keeps any livestock.</p> <p>Grow Crops</p> <p>Refers to the seeding, planting, or caring of crops (now or at any time during 1971) with the intention of harvesting or selling them.</p>	<p>Keep Livestock</p> <p>Refers to all livestock and poultry on the holding (now or at any time during 1971) regardless of ownership. Includes livestock owned by the holder if they are on common or public grazing land. Also includes bees, silkworms, rabbits and other fur-bearing animals in captivity on the holding.</p> <p>Holding</p> <p>Land which is used wholly or partly for agricultural production and is operated as a unit; that is, under the same management and with the same means of production (labor force, machinery, or animals). A holding may comprise more than one parcel of land.</p> <p>Holder or Person in Charge</p> <p>The person who makes the day-to-day decisions concerning the operations of a holding. The holder may do the work himself or he may supervise the work of others.</p> <p>On Own Account</p> <p>Holding operated by an individual or members of a household independently from any other holding or persons. The holder is not responsible to any other person(s) for the operations of the holding. The holder need not own the land.</p> <p>In Partnership</p> <p>Holding operated by two or more persons who share in the operations and the agricultural production of the holding. Partners may live in the same household or in separate households.</p> <p>As Hired Manager</p> <p>Holding operated by a person who takes the responsibility for the operations of the holding. He makes the day-to-day decisions and either does the work himself or supervises the work of others, employing additional labor if necessary. He is generally paid a salary or may receive a share of the agricultural production. Do not confuse him with a hired man or caretaker who simply carries out his employer's instructions.</p> <p>As Chieftain (Headman)</p> <p>Holding operated by the administrative head or leader of a tribe or clan. The chieftain supervises tribal land which is not assigned to members.</p>	<p>Ask about -</p> <p>WHEAT in Bolivar, Los San-Tho, Paris, and Rajpur Provinces.</p> <p>RICE in all other provinces.</p> <p>If response is not given in hectares, be sure to convert to hectares before making the entry in column 14.</p>	<p>WHEN TO FILL A-1a QUESTIONNAIRE</p> <p>Fill an A-1a for each holding represented by a circled number in column 9, 10, 11 or 12 of the A-2a Listing Book. In some cases, you may have more than one entry in these columns for the same holder; for example, a holding operated "on own account" and a second holding operated "as hired manager or chieftain." If both are circled, fill an A-1a for each holding; if only one is circled, fill an A-1a for that holding; if neither is circled, do not fill A-1a.</p>																								
<p>LAND AREA CONVERSION FACTORS</p> <p>1 tanbo = 1/10 (0.1) of a hectare. To convert tanbos to hectares, multiply the number of tanbos by 1/10 (or 0.1). If less than 1 hectare, report in tenths; if more than 1 hectare, round to the nearest whole number. Check your results as follows:</p> <table border="1"> <thead> <tr> <th>If number of tanbos is -</th> <th>Then converted figure in hectares should be in -</th> </tr> </thead> <tbody> <tr> <td>Less than 1</td> <td>Column 8 (Mark "X")</td> </tr> <tr> <td>1 - 499</td> <td>Column 9</td> </tr> <tr> <td>500 - 999</td> <td>Column 10</td> </tr> <tr> <td>1000 - 1999</td> <td>Column 11</td> </tr> <tr> <td>2000 or more</td> <td>Column 12</td> </tr> </tbody> </table> <p>1 manzana = 6/10 (0.6) of a hectare. To convert manzanas to hectares, multiply the number of manzanas by 6/10 (or 0.6). If less than 1 hectare, report in tenths; if more than 1 hectare, round to the nearest whole number. Check your results as follows:</p> <table border="1"> <thead> <tr> <th>If number of manzanas is -</th> <th>Then converted figure in hectares should be in -</th> </tr> </thead> <tbody> <tr> <td>Less than 0.17</td> <td>Column 8 (Mark "X")</td> </tr> <tr> <td>0.17 - 83</td> <td>Column 9</td> </tr> <tr> <td>84 - 166</td> <td>Column 10</td> </tr> <tr> <td>167 - 333</td> <td>Column 11</td> </tr> <tr> <td>334 or more</td> <td>Column 12</td> </tr> </tbody> </table>		If number of tanbos is -	Then converted figure in hectares should be in -	Less than 1	Column 8 (Mark "X")	1 - 499	Column 9	500 - 999	Column 10	1000 - 1999	Column 11	2000 or more	Column 12	If number of manzanas is -	Then converted figure in hectares should be in -	Less than 0.17	Column 8 (Mark "X")	0.17 - 83	Column 9	84 - 166	Column 10	167 - 333	Column 11	334 or more	Column 12		
If number of tanbos is -	Then converted figure in hectares should be in -																										
Less than 1	Column 8 (Mark "X")																										
1 - 499	Column 9																										
500 - 999	Column 10																										
1000 - 1999	Column 11																										
2000 or more	Column 12																										
If number of manzanas is -	Then converted figure in hectares should be in -																										
Less than 0.17	Column 8 (Mark "X")																										
0.17 - 83	Column 9																										
84 - 166	Column 10																										
167 - 333	Column 11																										
334 or more	Column 12																										

Exhibit V-2-4. LISTING BOOK (PROVINCES), FORM A-2a--Continued

(Form for actual use would contain 16 identical listing pages)

Line No.	Road name or No.	Name of head of household and location or description of housing unit	Does any member of this household —		What is the name of each member of this household who operates (has charge of) holding?	How does this person operate the holding — on own account, in partnership, as hired manager or chieftain?	How much land does this person have — including cropland, pastureland, woodland, etc.?				What is the name of this holding?	On how much land did you grow ... during 1971? (See inside front cover) (hectares)	How many calves and calves of all ages are now on this holding — including those on common or public land if owned jointly by your tribe or clan? (15)	Respondent	FOR SUPERVISOR'S USE			FOR ENUMERATOR'S USE	NOTES (Explanations, collocation, instructions, etc.)		
			Grow any crops of any kind — field, orchard, etc. (now or at any time during 1971)?	Keep any livestock or other animals (now or at any time during 1971)?			(17) YES	(18) NO	(19) Preliminary A-1a No.	(20) Date A-1a completed					(21) Date A-1a approved						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain	Under 1/10 1/10 to 49 50 to 99 100 to 199 200 or more	hec- tars hec- tars hec- tars hec- tars	100 100 100 100 200				<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
2		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
3		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
4		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
5		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
6		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
7		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
8		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
9		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
10		Name of head Location of unit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> On own account <input type="checkbox"/> In partnership <input type="checkbox"/> As hired manager or chieftain							<input type="checkbox"/> Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify)								
TOTAL ENTRIES (Including wavy-line entries)																					

Exhibit V-2-4. LISTING BOOK (PROVINCES), FORM A-2a--Continued

(Form for actual use would contain 16 identical listing pages)

Line No.	Road name or No.	(3)	Does any member of this household -		(6)	(7)	How much land does this person have - land, etc.?				(13)	(14)	(15)	(16)	FOR SUPERVISOR'S USE				FOR ENUMERATOR'S USE	FOR SUPERVISOR'S USE	NOTES		
			Grow any crops, garden, or trees or at any time during 1971?	Keep any livestock, poultry, or swine during 1971?			Under 1/10 to 1/100 of total taxable area (8)	1/10 to 1/100 of total taxable area (9)	1/100 to 1/10 of total taxable area (10)	1/10 to 1/10 of total taxable area (11)					1/10 to 1/10 of total taxable area (12)	Date listing approved (17)	National Certainty holding (18)	Preliminary No. (19)				Date A-1a completed (20)	Date A-1a approved (21)
1		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief	Under 1/10 to 1/100 of total taxable area (8)	1/10 to 1/100 of total taxable area (9)	1/100 to 1/10 of total taxable area (10)	1/10 to 1/10 of total taxable area (11)	1/10 to 1/10 of total taxable area (12)	What is the name of this holding?	On how much land did you grow ... at any time during 1971? (See inside front cover) (theacres)	How many cattle and horses on this holding - including those on common land and it owned by you (by your employer or your title or clan)? (15)	Respondent Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
2		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
3		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
4		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
5		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
6		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
7		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
8		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
9		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
10		Name of head Location of unit	Yes No	Yes No		On own account In partnership As hired manager or chief									Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>								
TOTAL ENTRIES (Including wavy-line entries)																							

Exhibit V-2-4. LISTING BOOK (PROVINCES), FORM A-2a--Continued

SUMMARY OF PAGE TOTALS												NOTES	
Page No.	Total holdings Column 7	On each line, sum of columns 8 through 12 must equal column 7				National Certainty holdings YES in column 18	On each line, sum of columns 8 through 12 must equal figure for YES in column 18				On each line, figure for NO in 18 plus figure for YES in 18 must equal column 7		
		Column 8	Column 9	Column 10	Column 11		Column 12	Column 8	Column 9	Column 10			Column 11
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
PSU TOTAL													

Transcribe to line (h) on front cover

Transcribe to line (i) on front cover

Exhibit V-2-5. NATIONAL CERTAINTY LISTING (PROVINCES), FORM A-2c

CONFIDENTIAL — This inquiry is required by law. All information will be held strictly confidential.										SHEET _____ OF _____ SHEET 13							
NATIONAL CERTAINTY LISTING 1971 CENSUS OF AGRICULTURE (Provinces)										U.S. DEPARTMENT OF COMMERCE — BUREAU OF THE CENSUS							
MINISTRY OF ECONOMY NATIONAL STATISTICAL SERVICE										U.S. DEPARTMENT OF COMMERCE — BUREAU OF THE CENSUS							
FOR PCO USE										FOR NSO USE							
a. Supervisor										b. Province name							
c. Displet name										d. List prepared by							
e. Date prepared																	
Line No.	Name and mailing address of holding	Location holding	Name of holder and location where holder can be reached	Total number of hectares in holding (Approximate)	Type of holding (cattle, cotton, hogs and cotton, etc.)	Preliminary A-1c No.	A-1c assigned	Completed	Date A-1c Approved	Sent to PCO	Received	Date A-1c Approved	Sent to NSO	Received	Date A-1c received	Notes	
(1)	Name	Road or highway	Name	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
1	Mailing address	Nearest hamlet or urban place	Location				<input type="checkbox"/> Yes <input type="checkbox"/> No										
2	Mailing address	Nearest hamlet or urban place	Location				<input type="checkbox"/> Yes <input type="checkbox"/> No										
3	Mailing address	Nearest hamlet or urban place	Location				<input type="checkbox"/> Yes <input type="checkbox"/> No										
4	Mailing address	Nearest hamlet or urban place	Location				<input type="checkbox"/> Yes <input type="checkbox"/> No										
5	Mailing address	Nearest hamlet or urban place	Location				<input type="checkbox"/> Yes <input type="checkbox"/> No										
6	Mailing address	Nearest hamlet or urban place	Location				<input type="checkbox"/> Yes <input type="checkbox"/> No										

COPY DISTRIBUTION: BUFF — Supervisor

SALMON — PCO

WHITE — NSO

Exhibit V-2-6. LISTING BOOK (NORTHERN TERRITORY), FORM A-2b

MINISTRY OF ECONOMY National Statistical Office		b. Zone name		c. PSU No.	
a. Sampling		PSU sampling		Code	
Start with		Take every		Chiefdom	
Area measurement sampling		Territorial district		Number of A-1b Questionnaires	
Start with		Location			
FOR ENUMERATOR'S USE					
e. Listing		Date started	Date completed		
f. Filling A-1b Questionnaires					
g. Enumerator's signature:					
h. Number of holding		Total	PSU total of column -	For area measurement	
		Col. 7	(11)	(12)	
i. On National Certainty Listing Form (A-2d)		Col. 13			
i. Eligible for PSU sample (Line h minus line i)					
k. In PSU sample (A-1b required)		Date	Initials	Number of A-1b Questionnaires	
FOR SUPERVISOR'S USE					
l. Listing approved and sample selected					
m. Payment for listing authorized					
n. A-1b Questionnaires received and accepted					
o. Payment for A-1b Questionnaires authorized					
p. Supervisor's signature:					
FOR TERRITORIAL CENSUS OFFICE USE					
q. Listing book (A-2b) checked in					
r. A-1b Questionnaire's checked in					
FOR NATIONAL STATISTICAL OFFICE USE					
s. Listing book (A-2b) checked in					
t. A-1b Questionnaires checked in					
u. Weight entered on A-1b Questionnaires					

LISTING BOOK
(Northern Territory)

1971 CENSUS OF AGRICULTURE

CONFIDENTIAL - This inquiry is required by law. All information will be held strictly confidential.

NOTES

Exhibit V-2-6. LISTING BOOK (NORTHERN TERRITORY), FORM A-2b--Continued

STEPS FOR LISTING AND SAMPLING	RE M I N D E R S
<p>1. Fill columns 1 through 10 for each holding.</p> <p>2. As each page of listings is completed, fill columns 11, 12, and 13.</p> <p>3. Add the entries for columns 7, 11, 12, and 13; then transcribe the totals to "Summary of Page Totals" on the inside back cover.</p> <p>4. When entire PSU is listed, obtain the PSU totals in "Summary of Page Totals," then transcribe the totals to line (h) or (i) on the front cover. Complete line (j).</p> <p>5. Select the sample of holdings from the "X" entries in columns 11 and 12 by applying the "start with" and "take every" figures for "PSU sampling" given in item (a) on the front cover. Apply the sampling pattern to the "X" entries in column 11 for the entire PSU, then continue the pattern for the "X" entries in column 12. Circle the "X" entry for each holding that falls in the sample.</p> <p>6. Count the number of circled "X" entries in columns 11 and 12, respectively, then transcribe the totals for the PSU to line (k) on the front cover.</p> <p>7. Check that the sum of columns 11 and 12 on line (k) agrees with the number of sample cases in the appropriate table (table 1, 2, 3, 4, or 5 in the Appendix of the Enumerator's Reference Manual).</p> <p>8. Assign preliminary A-1b numbers to the holdings with circled "X" in column 11, then continue the numbering for the circled "X" holdings in column 12. Enter the A-1b numbers in columns 14 and 15, respectively.</p> <p>9. Select the cases for area measurement by applying the "start with" and "take every" figures for "Area measurement sampling" given in item (a) on the front cover. Apply the sampling pattern to the A-1b numbers first in column 14 for the entire PSU, then continue the pattern in column 15. Circle all A-1b numbers for those holdings selected for area measurement. (Check with table 6 in Enumerator's Manual.)</p>	<p>Canvassing Locate each housing unit within the PSU boundaries. List in systematic order. Follow each road or path to be sure you find all housing units. Indicate direction of travel on the PSU map.</p> <p>Listing List each household on a separate line of the Listing Book, and fill the appropriate columns. If the housing unit is vacant, write VACANT in the space for "Name of head" in column 3, enter "Location of unit" in column 3, and leave columns 4 to 19 blank. When each line is completed, enter "X" in column 20.</p> <p>Callbacks Make return visits when you cannot find a reliable respondent. Keep a record of callbacks in column 20.</p> <p>"None" Entry If "None" for column 8 or 9, enter a dash (-). Do not leave blank.</p> <p>Housing Unit House, hut, tent, room, or group of rooms occupied or intended for occupancy as separate living quarters by a family or other group of persons living together, or by a person living alone.</p> <p>Household The person or group of persons who occupy one housing unit. The household may include nonrelatives (such as lodgers, servants, hired hands).</p> <p>Polygamous Husband Husband with more than one wife. If the wives live with the husband in the same household, list the husband as head; if the wives live in separate households, list the husband with the first-married wife and consider him as the head. Consider the husband as the holder if he grows any crops or keeps any livestock.</p> <p>Grow Crops Refers to the seeding, planting, or caring of crops (now or at any time during 1971) with the intention of harvesting or selling them.</p> <p>Keep Livestock Refers to all livestock and poultry on the holding (now or at any time during 1971) regardless of ownership. Includes livestock owned by the holder if they are on common or public grazing land. Also includes bees, silkworms, rabbits and other fur-bearing animals in captivity on the holding.</p> <p>Holding Land which is used wholly or partly for agricultural production and is operated as a unit; that is, under the same management and with the same means of production (labor force, machinery, or animals). A holding may comprise more than one parcel of land.</p> <p>Holder or Person in Charge The person who makes the day-to-day decisions concerning the operations of a holding. The holder may do the work himself or he may supervise the work of others.</p> <p>On Own Account Holding operated by an individual or members of a household independently from any other holding or persons. The holder is not responsible to any other person(s) for the operations of the holding. The holder need not own the land.</p> <p>In Partnership Holding operated by two or more persons who share in the operations and the agricultural production of the holding. Partners may live in the same household or in separate households.</p> <p>As Chief (Headman) Holding operated by the administrative head or leader of a tribe or clan. The chieftain supervises tribal land which is not assigned to members.</p> <p>As Hired Manager Holding operated by a person who takes the responsibility for the operations of the holding. He makes the day-to-day decisions and either does the work himself or supervises the work of others, employing additional labor if necessary. He is generally paid a salary or may receive a share of the agricultural production. Do not confuse him with a hired man or caretaker who simply carries out his employer's instructions.</p>
<p>WHEN TO FILL A-1b QUESTIONNAIRE</p> <ul style="list-style-type: none"> • Fill an A-1b questionnaire for all holdings which have been assigned an A-1b number in column 14 or 15. • Do the "area measurement" for all holdings which have a circled A-1b number in column 14 or 15. 	

Exhibit V-2-6. LISTING BOOK (NORTHERN TERRITORY), FORM A-2b--Continued

(Form for actual use would contain 16 identical listing pages)

Line No.	Road name or No.	Name of head of household and location of housing unit (If female, determine if she is first of several wives; if so, list husband as holder)	Did any member of this household —		What is the name of each member of this household who operates or manages an agricultural holding? (Use a separate line for each such member, beginning with column 6; for partners in joint ownership, use only one line.)	How did this person operate the holding — on own account, in partnership, as chief, or hired manager? (Mark as many as applicable)	How many of the following animals are now on this holding — including those on common or public land if your tribe or clan (by your employer) — Cattle and calves of all ages? (If 25 or more, circle more, circle the rest) (8) Sheep and goats of all ages? (If 100 or more, circle more, circle the rest) (9)	Respondent	PSU sampling		National Certainty holding (If YES, draw through columns 11 and 12) YES NO (13)	A-1b Questionnaire			FOR SUPERVISOR'S USE		NOTES (Explorations, call-back information, instructions, etc.)		
			Grow any crops of any kind — field, garden, etc., at any time during 1971?	Keep any livestock — horses, cattle, sheep, etc., at any time during 1971?					Enter "X" if entry — Circled in column 8 or 9 (11) NOT circled in column 8 or 9 (12)	Preliminary A-1b No. for circled "X" in — Column 11 Column 12 (14) (15)		Date basic questionnaire completed (16)	Date area measurement completed (17)	Date listing approved (18)	Date A-1b approved (19)				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
2		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
3		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
4		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
5		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
6		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
7		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
8		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
9		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
10		Name of head Location of unit	Yes No	Yes No		On own account In partnership As chief As hired manager			Head <input type="checkbox"/> Wife <input type="checkbox"/> Other relative <input type="checkbox"/> Other (Specify) <input type="checkbox"/>										
TOTAL ENTRIES (Including wavy-line entries.)																			

Exhibit V-2-6. LISTING BOOK (NORTHERN TERRITORY), FORM A-2b--Continued

SUMMARY OF PAGE TOTALS							NOTES	
Page No.	Total holdings Column 7	On each line, sum of columns 11 and 12 must equal column 7		National Certainty holdings YES in column 13	On each line, sum of columns 11 and 12 must equal figure for YES in column 13			On each line, figure for NO in 13 plus figure for YES in 13 must equal column 7
		Column 11	Column 12		YES in column 13 and entry in — Column 11 Column 12	NO in column 13		
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
PSU TOTAL								
		Transcribe above totals to line (h) on front cover		Transcribe above totals to line (i) on front cover				

Exhibit V-2-7. NATIONAL CERTAINTY LISTING (NORTHERN TERRITORY), FORM A-2d

CONFIDENTIAL — This inquiry is required by law. All information will be held strictly confidential.										FOR TCO USE		FOR NSO USE					
NATIONAL CERTAINTY LISTING 1971 CENSUS OF AGRICULTURE (Northern Territory)										a. Supervisor		b. Zone name		c. District name		Code	
MINISTRY OF AGRICULTURE NATIONAL STATISTICAL OFFICE										d. List prepared by		e. Date prepared					
Line No.	Name of holding (2)	Location of holding (3)	Name of holder and location where holder can be reached (4)	Total number of hectares in holding (Approximate) (5)	Type of holding (cattle, cotton, hogs and cotton, etc.) (6)	Preliminary A-Id No. (7)	FOR SUPERVISOR'S USE				FOR TCO USE				FOR NSO USE		Notes (16)
							A-Id assigned (8)	Completed (9)	Approved (10)	Sent to TCO (11)	Received (12)	Approved (13)	Sent to NSO (14)	Date A-Id received (15)			
(1)		Road or highway	Name Location				To Date										
1		Nearest hamlet or chiefdom Directions	Name Location				To Date										
2		Road or highway	Name Location				To Date										
3		Nearest hamlet or chiefdom Directions	Name Location				To Date										
4		Road or highway	Name Location				To Date										
5		Nearest hamlet or chiefdom Directions	Name Location				To Date										
6		Road or highway	Name Location				To Date										

U.S. DEPARTMENT OF COMMERCE — BUREAU OF THE CENSUS

WHITE — NSO

GREEN — TCO

BLUE — Supervisor

COPY DISTRIBUTION:

*Exhibit V-2-8. INSTRUCTIONS FOR COMPILING LIST OF NATIONAL CERTAINTY HOLDINGS (PROVINCES),
FORM A-250(L)*



OFFICE OF THE DIRECTOR

MINISTRY OF ECONOMY
NATIONAL STATISTICAL OFFICE
CALICUT

1 July 1971

Mr. Carlos D'Agostino
Agricultural Agent
District Office of the Ministry of Agriculture
Sacramento, Valencia

Dear Sir:

As you are aware, the Ministry of Economy is preparing for the 1971 Census of Agriculture. By co-operative agreement, the Ministry of Agriculture requests District Agricultural Agents to help us in a preliminary operation which is vital to the taking of the census. In order to obtain meaningful results, we must be able to identify large holdings and those with specialized operations.

As special agents of the National Statistical Office, sworn to uphold the confidentiality of census information, your cooperation and assistance are requested. Your assignment is to supply the National Statistical Office with a list of selected holdings in your districts—those with 500 hectares or more and those with specialized agricultural operations as specified on the reverse side of this letter. These holdings will be referred to as National Certainty holdings.

For census purposes, a holding is defined as all land which is used wholly or partly for agricultural production and is operated as a unit. The holder is defined as the person who has the responsibility for the operation of the holding; that is, the person who makes the day-to-day decisions concerning the operation of the holding and either does the work himself or directly supervises the work of others. The holder may be an owner, partner-in-charge, hired manager, renter, or chief-tain of a tribe or clan.

Enclosed are blank copies of the National Certainty Listing (Form A-2c). List each holding on a separate line. Fill an original and one carbon copy. Fill heading items b through e on each sheet. Also complete columns 2 through 6 in accordance with the instructions on the reverse side of this letter. Please print or type all entries on the A-2c. If printed, print firmly so the carbon copy will be clear and legible. As stated, you are asked to supply information for columns 2 through 6.

For statistical reasons, it is important that this list be as complete as possible. You are encouraged to use not only your own records and knowledge of the district, but any other sources that may be available. These may include tax records, health authority records, local agricultural cooperatives, and marketing associations.

Enclosed you will also find a List of 1961 Large Holdings (Form A-3). According to the 1961 Census of Agriculture, these holdings had 500 hectares or more in 1961. Many of these holdings may still be in operation. If this is the case, they should be included on Form A-2c. If there has been a change of ownership or holder, report the present name of holding and holder. If the 1961 holding is no longer in existence, please give a brief explanation why it is no longer in operation (land reform, land sold to several buyers, etc.). Enter such remarks in column 7 of Form A-3.

Please return both copies of the National Certainty Listing (Form A-2c) and the List of 1961 Large Holdings (Form A-3) to your Province Office of the Ministry of Agriculture; please send them in time to reach the Province Office no later than 1 September 1971.

Your cooperation in obtaining this information will contribute greatly to the success of the 1971 Census of Agriculture for Agrostan. Thank you for your time and assistance in this matter.

Yours truly,

Jose Ben Agru
Director
National Statistical Office

Enclosures
A-250(L)

*Exhibit V-2-8. INSTRUCTIONS FOR COMPILING LIST OF NATIONAL CERTAINTY HOLDINGS (PROVINCES),
FORM A-250(L)--Continued*

INSTRUCTIONS FOR COLUMNS 2 THROUGH 6 OF A-2c

List all holdings which meet the following requirements:

- (a) Holdings with 500 hectares or more
- (b) Nurseries and greenhouses producing growing stock for sale
- (c) All holdings producing silk fiber
- (d) Holdings with a total of 5,000 or more poultry (chickens, turkeys, ducks, etc.) on hand now or at any time during 1971
- (e) Dairy holdings with 100 or more milk animals on hand now or at any time during 1971
- (f) Feedlots with 500 or more animals on hand now or at any time during 1971
- (g) All government-owned experimental holdings

Column 2: Report name of holding; for example, Diamond Cattle Ranch, Southern Coffee Plantation, etc. Also report the mail address of the holding. An Agriculture Census Questionnaire will be mailed to each of the National Certainty holdings; to insure their delivery, report an adequate mailing address.

Column 3: Report the hamlet or urban place which is close to the holding. Also give the name of the road or highway where the holding is located and any other directions which will enable the census enumerator to locate the holding (for example, 2 kilometers south of the intersection of highway 6 and the District Line).

Column 4: Report the holder's full name. In cases of corporate holdings, report the name of the person who is in charge of the agricultural operations of the corporation. This is generally a hired manager, but may be the major stockholder or president of the corporation. Location of holder refers to where the holder can be found during the day. If the holder lives on the holding, enter "Same as column 3". If he does not live on the holding but generally can be found working on the holding, enter "Same as column 3". Otherwise, describe where he can be contacted for an interview.

Column 5: Report the approximate area in the holding (in hectares).

Column 6: Describe briefly the type of holding according to the major product or activity; for example, crops, cattle, sheep.

Exhibit V-2-9. LIST OF 1961 LARGE HOLDINGS (PROVINCES), FORM A-3

FORM A-3 (AGROSTAN) (March 1971)					MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE		a. Province name		Code
LIST OF 1961 LARGE HOLDINGS (Provinces)					b. District name				Code
Line No. (1)	Name of holding (2)	Name of respondent (3)	Size of holding (hectares) (4)	Type of holding (crop, livestock, crop and livestock) (5)	FOR AGRICULTURAL AGENT'S USE				
					National Certainty holding in 1971 (6)		Form A-2c		Notes (7)
					(Mark one)	Sheet No.	Line No.		
1					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
2					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
3					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
4					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
5					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
6					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
7					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
8					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
9					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
10					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
11					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
12					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
13					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
14					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
15					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
16					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
17					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
18					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
19					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				
20					<input type="checkbox"/> Yes <input type="checkbox"/> No — Explain in column (7)				

*Exhibit V-2-10. INSTRUCTIONS FOR COMPILING LIST OF NATIONAL CERTAINTY HOLDINGS
(NORTHERN TERRITORY), FORM A-251(L)*



MINISTRY OF ECONOMY
NATIONAL STATISTICAL OFFICE
CALICUT

OFFICE OF THE DIRECTOR

1 June 1971

Mr. Bella Saladin
District Marshal
Office of the Governor
Zanzi, Northern Territory

Dear Sir:

As you are aware, the Ministry of Economy is preparing for the 1971 Census of Agriculture. By co-operative agreement, the Ministry of Agriculture requests District Marshals to help us in a preliminary operation which is vital to the taking of the census. In order to obtain meaningful results, we must be able to identify large holdings and those with specialized operations.

As special agents of the National Statistical Office, sworn to uphold the confidentiality of census information, your cooperation and assistance are requested. Your assignment is to supply the National Statistical Office with a list of selected holdings in your district — those with 500 hectares or more and those with specialized agricultural operations, as specified on the reverse side of this letter. These holdings will be referred to as National Certainty holdings.

For census purposes, a holding is defined as all land which is used wholly or partly for agricultural production and is operated as a unit. The holder is defined as the person who has the responsibility for the operation of the holding; that is, the person who makes the day-to-day decisions concerning the operation of the holding and either does the work himself or directly supervises the work of others. The holder may be an owner, partner-in-charge, hired manager, renter, or chieftain of a tribe or clan.

Enclosed are blank copies of the National Certainty Listing (Form A-2d). List each holding on a separate line. Fill an original and one carbon copy. Fill heading items b through e on each sheet. Also complete columns 2 through 6 in accordance with the instructions on the reverse side of this letter. Please print or type all entries on the A-2d. If printed, print firmly so that the carbon copy will be clear and legible. As stated, you are asked to fill columns 2 through 6.

For statistical reasons, it is important that this list be as complete as possible. You are encouraged to use not only your own records and knowledge of the district, but any other sources that may be available. These may include tax records, health authority records, local agricultural cooperatives, and marketing associations.

Please return both copies of the National Certainty Listing (Form A-2d) to the Territorial Office of the Ministry of Agriculture; please send them in time to reach that office no later than 15 July 1971.

Your cooperation in obtaining this information will contribute greatly to the success of the 1971 Census of Agriculture for Agrostan. Thank you for your time and assistance in this matter.

Yours truly,

Jose Ben Agru
Director
National Statistical Office

Enclosures
A-251(L)

*Exhibit V-2-10. INSTRUCTIONS FOR COMPILING LIST OF NATIONAL CERTAINTY HOLDINGS
(NORTHERN TERRITORY), FORM A-251(L)--Continued*

INSTRUCTIONS FOR COLUMNS 2 THROUGH 6 OF A-2d

List all holdings which meet the following requirements:

- (a) Holdings with 500 hectares or more
- (b) Nurseries and greenhouses producing growing stock for sale
- (c) All holdings producing silk fiber
- (d) Holdings with a total of 5,000 or more poultry (chickens, turkeys, ducks, etc.) on hand now or at any time during the past 12-month period
- (e) Dairy holdings with 100 or more milk animals on hand now or at any time during the past 12-month period
- (f) Feedlots with 500 or more animals on hand now or at any time during the past 12-month period
- (g) All government-owned experimental holdings

Column 2: Report name of holding; for example, Diamond Cattle Ranch, Northern Coffee Plantation, etc.

Column 3: Report hamlet or chiefdom which is close to the holding. Also give the name of the road or trail where the holding is located and any other directions which will enable the census enumerator to locate the holding (for example, 2 kilometers south of the intersection of highway 6 and the Hubli River).

Column 4: Report the holder's full name. In cases of corporate holdings, report the name of the person who is in charge of the agricultural operations of the corporation. This is generally a hired manager, but may be the major stockholder or president of the corporation. Location of holder refers to where the holder can be found during the day. If the holder lives on the holding, enter "Same as column 3". If he does not live on the holding but generally can be found working on the holding, enter "Same as column 3". Otherwise, describe where he can be contacted for an interview.

Column 5: Report the approximate area in the holding (in hectares).

Column 6: Describe briefly the type of holding according to the major product or activity; for example, crops, cattle, sheep.

Exhibit V-2-11. OBSERVATION AND REVIEW OF LISTING (PROVINCES), FORM A-121

Form A-121 (AGROSTAN) (March 1971) MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE OBSERVATION AND REVIEW OF LISTING (Provinces) 1971 CENSUS OF AGRICULTURE		A. Enumerator				B. Supervisor						
		C. Province				Code		D. District		Code		
		E. Visit		F. PSU No.		G. Number of lines				H. Date		
						Observed		Reviewed				
		1										
		2										
		3										
		4										
		5										
INSTRUCTIONS: Fill this form each time you OBSERVE enumerator or REVIEW his work. Circle Y for YES or N for NO.												
Item	Did enumerator –	VISIT										Notes
		1		2		3		4		5		
		O	R	O	R	O	R	O	R	O	R	
1	Locate PSU boundary correctly?	Y N		Y N		Y N		Y N		Y N		
2	Canvass area thoroughly?	Y N		Y N		Y N		Y N		Y N		
3	Show identification card?	Y N		Y N		Y N		Y N		Y N		
4	Explain census properly?	Y N		Y N		Y N		Y N		Y N		
5	Draw arrows on map to show direction of travel?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	
6	Inquire about living quarters in structures which appear nonresidential?	Y N		Y N		Y N		Y N		Y N		
7	Read questions as written?	Y N		Y N		Y N		Y N		Y N		
8	Obtain answers to both column 4 and column 5?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	
9	Follow instruction correctly in column 6?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	
10	Understand how to use sublines in columns 7 to 15?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	
11	Correctly enter "X" in column 8 or amount in column 9, 10, 11, or 12?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	
12	Remember to check "respondent" in column 16?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	
13	Leave good impression and prepare way for possible return visit?	Y N		Y N		Y N		Y N		Y N		
General comments on overall performance												

**Exhibit V-2-12. OBSERVATION AND REVIEW OF AGRICULTURE QUESTIONNAIRES (PROVINCES),
FORM A-122**

Form A-122 (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE		A. Enumerator				B. Supervisor			
OBSERVATION AND REVIEW OF AGRICULTURE QUESTIONNAIRES (Provinces) 1971 CENSUS OF AGRICULTURE		C. Date				D. Province				Code	
		E. District				Code		F. PSU No.			
INSTRUCTIONS: Use a separate form for each visit. Use a separate column for each interview observed or questionnaire reviewed. Circle Y for YES or N for NO; mark with an X if not applicable.											
Line	Did enumerator -	Holding observed or reviewed (Enter A-1 number)								COMMENTS	
O	R										
1		Use information from previous visit (listing) to establish rapport?	Y	N	Y	N	Y	N	Y	N	Y
2	2	Complete identification items correctly?	Y	N	Y	N	Y	N	Y	N	Y
3		Make clear what holding was to be discussed?	Y	N	Y	N	Y	N	Y	N	Y
4		In 1a, reach clear understanding of area unit of measurement?	Y	N	Y	N	Y	N	Y	N	Y
5		In 1b, verify method of operation as reported on Listing Form?	Y	N	Y	N	Y	N	Y	N	Y
6		Read correct version of introductory statement to Section II?	Y	N	Y	N	Y	N	Y	N	Y
7	7	Complete 6a?	Y	N	Y	N	Y	N	Y	N	Y
8	8	In 7c, specify "other" basis?	Y	N	Y	N	Y	N	Y	N	Y
9		In 9, make clear what land is being referred to?	Y	N	Y	N	Y	N	Y	N	Y
10		In 10 or 13, carefully read statement while making computations?	Y	N	Y	N	Y	N	Y	N	Y
11		In 14, make clear what land is being referred to?	Y	N	Y	N	Y	N	Y	N	Y
12		In 15, make clear what land is being referred to?	Y	N	Y	N	Y	N	Y	N	Y
13		Carefully read introductory statements to Sections III and IV?	Y	N	Y	N	Y	N	Y	N	Y
14		In Sections III and IV, follow correct sequence of questioning within each group of crops?	Y	N	Y	N	Y	N	Y	N	Y
15	15	In Sections III and IV, ascertain carefully the units of production?	Y	N	Y	N	Y	N	Y	N	Y
16		In Sections III and IV, give sufficient emphasis to "catch-all" questions (24, 27, 32, etc.)?	Y	N	Y	N	Y	N	Y	N	Y
17	17	Correctly compute totals for 57 and 82?	Y	N	Y	N	Y	N	Y	N	Y
18		Correctly complete 83?	Y	N	Y	N	Y	N	Y	N	Y
19	19	Correctly complete 84?	Y	N	Y	N	Y	N	Y	N	Y
20		Carefully read introductory statement to Section VI?	Y	N	Y	N	Y	N	Y	N	Y
21		Correctly complete 85a by asking respondent rather than by computing?	Y	N	Y	N	Y	N	Y	N	Y
22	22	Check to see that sum of 85a through 85g equals total in 85?	Y	N	Y	N	Y	N	Y	N	Y
23	23	Correctly complete 86 and reconcile with 85a?	Y	N	Y	N	Y	N	Y	N	Y
24		In Section VIII, follow correct sequence of questioning?	Y	N	Y	N	Y	N	Y	N	Y
25	25	In 89, 92, 93, 94, and 95, check to see that subcategories add to totals?	Y	N	Y	N	Y	N	Y	N	Y
26		In Section VIII, give sufficient emphasis to "catch-all" questions (96, 99, 102, and 107)?	Y	N	Y	N	Y	N	Y	N	Y
27		Carefully read introductory statement to Section IX?	Y	N	Y	N	Y	N	Y	N	Y
28		In 113, obtain complete listing of all members of the household?	Y	N	Y	N	Y	N	Y	N	Y
29		Carefully read introductory statement to Section XIII?	Y	N	Y	N	Y	N	Y	N	Y
30	30	Correctly complete all parts of Enumerator's Record including signing name?	Y	N	Y	N	Y	N	Y	N	Y
		In general, did enumerator -	Comments								
31		Display pleasant businesslike attitude?									
32		Understand agriculture concepts (tenure, etc.)?									
33		Listen carefully, allow reasonable time for response?									
34		Accept suggestions and criticism well?									

Exhibit V-2-13. OBSERVATION AND REVIEW (NORTHERN TERRITORY), FORM A-123

Form A-123 (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE		A. Enumerator	B. Supervisor					
OBSERVATION AND REVIEW (Northern Territory) 1971 CENSUS OF AGRICULTURE				C. Date		D. Zone		Code 		
				E. District		Code 	F. PSU No.			
INSTRUCTIONS: Use a separate form for each visit. Under Part II, FILLING QUESTIONNAIRES, use a separate column for each interview observed or questionnaire reviewed. Circle Y for YES or N for NO; mark with an X if not applicable.										
Part I – LISTING				Number of lines observed 		Number of lines reviewed 				
Line	Did enumerator –	O	R	Comments						
1	Establish PSU boundary correctly?	Y N								
2	Canvass area thoroughly?	Y N								
3	Explain census properly?	Y N								
4	Read questions as written?	Y N								
5	Follow instructions correctly in column 6?	Y N	Y N							
6	Understand how to use sublines in columns 7 to 9 and 11 to 15?	Y N	Y N							
7	Circle entries in columns 8 and 9 when appropriate?	Y N	Y N							
8	Select sample for questionnaires correctly (columns 11 and 12)?	Y N	Y N							
9	Select sample for area measurement correctly (columns 14 and 15)?	Y N	Y N							
Part II – FILLING QUESTIONNAIRES										
Line	Did enumerator –	Holding observed or reviewed (Enter A-1 number)								Comments
		O	R							
1	Complete identification items correctly?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
2	Make clear what holding was to be discussed?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
3	In I, verify method of operation as reported on Listing Form?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
4	Carefully read introductory statement to Sections II and III?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
5	In Sections II and III, give sufficient emphasis to "catch-all" questions (13, 16, 21, etc.)?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
6	In Section IV, obtain production as necessary?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
7	Make sure entries in 77a and 78a were consistent with entries in Sections II and III?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
8	Carefully read introductory statement to Section VII?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
9	In Section VII, follow correct sequence of questioning in each grouping?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
10	In 82, 83, 84, 85, and 93, check to see that subcategories add to totals?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
11	In Section VII, give sufficient emphasis to "catch-all" questions (86, 89, 92, and 94)?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
12	Carefully read introductory statement to Section VIII?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
13	Carefully read statement to question 100?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
14	In 100, obtain complete listing of all members of the household?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
15	Measure area when appropriate?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
16	Follow correct procedures in measuring area and sketching?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
17	Correctly complete all parts of Enumerator's Record?	Y N		Y N	Y N	Y N	Y N	Y N	Y N	
	In general, did enumerator –									Comments
18	Understand agriculture concepts (tenure, etc.)?									
19	Listen carefully, allow reasonable time for response?									

Exhibit V-2-15. PROBLEM REFERRAL, FORM A-101

(Forms would be prepared in sets of three copies each)

Form A-101 (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE					
PROBLEM REFERRAL 1971 CENSUS OF AGRICULTURE		A. Routing <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">FROM (Name)</td> <td style="width: 50%;"> <input type="checkbox"/> NSO <input type="checkbox"/> Supervisor <input type="checkbox"/> PCO (TCO) <input type="checkbox"/> Enumerator </td> </tr> <tr> <td>TO (Name)</td> <td> <input type="checkbox"/> NSO <input type="checkbox"/> Supervisor <input type="checkbox"/> PCO (TCO) <input type="checkbox"/> Enumerator </td> </tr> </table>		FROM (Name)	<input type="checkbox"/> NSO <input type="checkbox"/> Supervisor <input type="checkbox"/> PCO (TCO) <input type="checkbox"/> Enumerator	TO (Name)	<input type="checkbox"/> NSO <input type="checkbox"/> Supervisor <input type="checkbox"/> PCO (TCO) <input type="checkbox"/> Enumerator
FROM (Name)	<input type="checkbox"/> NSO <input type="checkbox"/> Supervisor <input type="checkbox"/> PCO (TCO) <input type="checkbox"/> Enumerator						
TO (Name)	<input type="checkbox"/> NSO <input type="checkbox"/> Supervisor <input type="checkbox"/> PCO (TCO) <input type="checkbox"/> Enumerator						
B. Province or zone		Code	C. Date				
<i>Fill as applicable</i>							
SEE INSTRUCTIONS ON REVERSE		D. District	E. PSU No.				
PROBLEM - Answer required: <input type="checkbox"/> Yes <input type="checkbox"/> No							
ATTACHMENTS: <input type="checkbox"/> Yes (Describe) <input type="checkbox"/> No							
ANSWER:							
Answered or acknowledged by		Date					
Referred for reply to		Date					

Original and 1st copy - Receiver

2nd copy - Originator

U.S. DEPARTMENT OF COMMERCE - BUREAU OF THE CENSUS

*Exhibit V-2-15. PROBLEM REFERRAL, FORM A-101--Continued***INSTRUCTIONS**

The Problem Referral sheet is to be used to make inquiries or to report problems. Prepare original and two carbon copies; enter only one message per set.

Problem

State the problem as concisely as possible, but give all necessary details. Include your recommendations, if any, on how problem should be handled and attach forms, maps, notes, etc., as appropriate. Examples of messages or problems to be included are:

1. Questions on procedures or administrative matters.
2. Inadequacies or errors on maps or problems on boundaries.
3. Clarification of instructions.
4. Report on refusals, either complete or partial.
5. Inadequacies in work being returned for correction.

Attachments

If materials are attached to the Problem Referral, check "Yes" and list all materials; identify thoroughly.

Answer

If the problem is in the form of a question, receiver will enter reply here and enter name and date below. If problem concerns the return of work for correction or does not require a reply, receiver will acknowledge the message by entering name and date.

Distribution of Problem Referral sheets

The originator will write his message or question in the "Problem" section. He will keep the second carbon copy and transmit the other two copies to the receiver. The originator's copy will serve as a record of the initial inquiry in case a followup for reply is necessary.

The receiver will enter his reply or acknowledge receipt of the message on both copies using carbon paper. He will retain the carbon and return the original to the originator.

When the originator receives the answered or acknowledged copy, he will retain this copy and discard his carbon copy.

[illegible]

[illegible]

*Exhibit V-2-17. FIELD SUPERVISOR'S RECORD BOOK, FORM A-103*MINISTRY OF ECONOMY
NATIONAL STATISTICAL OFFICE**FIELD SUPERVISOR'S RECORD BOOK**
1971 CENSUS OF AGRICULTURE

Name of Supervisor	
Address	
Telephone number	
Province or zone	District

Section I – LIST OF APPLICANTS, ENUMERATOR ASSIGNMENTS,
AND RECORD OF ENUMERATOR PAY AUTHORIZATIONS

Section II – RECORD OF ENUMERATOR APPOINTMENTS

Section III – SUPERVISOR'S WEEKLY RECORD OF DAYS
WORKED AND KILOMETERS TRAVELED

Section IV – SCHEDULE OF VISITS TO ENUMERATORS

Section V – REASSIGNMENTS

NOTICE TO FINDER – This book is the property of the AGROSTAN Government. If found,
please return to nearest post office.

[illegible]

Exhibit V-2-17. FIELD SUPERVISOR'S RECORD BOOK, FORM A-103--Continued

[illegible]

Exhibit V-2-17. FIELD SUPERVISOR'S RECORD BOOK, FORM A-103--Continued

[illegible]

[illegible]

Exhibit V-2-17. FIELD SUPERVISOR'S RECORD BOOK, FORM A-103--Continued

NOTES

[illegible]

Exhibit V-2-18. FIELD WEEKLY PROGRESS REPORT, FORM A-104

Form A-104 (AGROSTAN) (March 1971) MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE FIELD WEEKLY PROGRESS REPORT 1971 CENSUS OF AGRICULTURE	<table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="border-bottom: 1px solid black;">A. Province or zone</td> <td style="border-bottom: 1px solid black; width: 10%;">Code</td> </tr> <tr> <td colspan="2" style="border-bottom: 1px solid black;">B. Routing:</td> <td style="border-bottom: 1px solid black;">Supervisor</td> </tr> <tr> <td style="border-bottom: 1px solid black;"><input type="checkbox"/> Supervisor to PCO(TCO)</td> <td colspan="2" style="border-bottom: 1px solid black;">District</td> </tr> <tr> <td style="border-bottom: 1px solid black;"><input type="checkbox"/> PCO (TCO) to NSO</td> <td colspan="2" style="border-bottom: 1px solid black;">Code</td> </tr> <tr> <td style="border-bottom: 1px solid black;">C. Date</td> <td style="border-bottom: 1px solid black;">D. Report period</td> <td style="border-bottom: 1px solid black;">From To</td> </tr> </table>	A. Province or zone		Code	B. Routing:		Supervisor	<input type="checkbox"/> Supervisor to PCO(TCO)	District		<input type="checkbox"/> PCO (TCO) to NSO	Code		C. Date	D. Report period	From To
A. Province or zone		Code														
B. Routing:		Supervisor														
<input type="checkbox"/> Supervisor to PCO(TCO)	District															
<input type="checkbox"/> PCO (TCO) to NSO	Code															
C. Date	D. Report period	From To														

1. Number of supervisors working (PCO or TCO only)	Number																																																				
2. Total number of PSU's	Number																																																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 45%;">Number of —</th> <th style="width: 15%;">This week</th> <th style="width: 15%;">From last report</th> <th style="width: 25%;">Total to date</th> </tr> <tr> <td>a. Enumerators working</td> <td></td> <td></td> <td></td> </tr> <tr> <td>b. PSU's assigned</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c. PSU's with listing completed</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d. PSU's with A-I's completed</td> <td></td> <td></td> <td></td> </tr> </table>	Number of —	This week	From last report	Total to date	a. Enumerators working				b. PSU's assigned				c. PSU's with listing completed				d. PSU's with A-I's completed																																				
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3. Total number of National Certainty holdings	Number																																																				
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TOTAL —————→	\$	\$	\$																																																		

Salmon — Originator White — Receiver

U.S. DEPARTMENT OF COMMERCE — BUREAU OF THE CENSUS

Exhibit V-2-19. PAY AUTHORIZATION, FORM A-105--Continued

INSTRUCTIONS TO THE SUPERVISOR

GENERAL

1. Prepare each authorization in triplicate.
2. Complete items B through G; number each authorization issued in order (1, 2, 3, etc.) in item F.
3. Fill authorizations in ballpoint pen and make no erasures. A correction may be made only by drawing a line through the erroneous entry and writing the correct entry above it, for example, ~~112.00~~ ^{114.00}. Any correction must be initialed and an explanation given in the "Notes" space.
4. Record each enumerator pay authorization in Section I of your Record Book, Form A-103. Give the white copy to the enumerator; take the green and yellow copies to the District Office of the Ministry of Economy.

Record your own approved weekly pay authorizations in Section III of your Record Book. Send all three copies to the PCO for approval. The approved white copy will be returned to you, and the yellow and green copies will be forwarded directly to the District Office of the Ministry of Economy.

Upon presentation of the copy, the District Office of the Ministry of Economy will assign a "Payment Number" to all copies, then forward the white copy to the NSO and the yellow copy to the PCO for accounting purposes.

I. PAYMENT TO ENUMERATOR

Complete the appropriate parts of this section, as described below, to authorize reimbursement for each satisfactorily completed portion of an enumerator's assignment:

- a. *Training* — Authorize payment for training on the first authorization issued for each enumerator, by entering the training fee in column 3 on this line.
- b. *Listing approved* — For each completed PSU listing that you have approved, enter the PSU No. in column 2 and the total amount in column 3.

c. *A-1 questionnaires approved — PSU's* — For each PSU for which you have approved the completed A-1's, enter the PSU No. in column 2 and the total amount in column 3.

d. *National Certainty questionnaires approved* — Enter in column 2 of this line the number of National Certainty questionnaires which you have approved and the total amount in column 3.

e. *Travel allowance* — Authorize payment for travel on the last authorization issued; enter the travel fee in column 3.

f. *Other authorized payment* — If you authorize payment of other miscellaneous expenses incurred in performance of duty (bus fare, bridge tolls, etc.) specify the type in column 1, the PSU No. in column 2, and the total amount in column 3.

Total line — Add all amounts shown in column 3.

Signatures — To certify the pay authorization, sign your name as "Field Supervisor," enter the date, and have the enumerator sign on the appropriate line to indicate agreement with the pay authorization.

II. PAYMENT TO SUPERVISOR (Weekly)

Complete this section each week. Refer to Section III of your Record Book to complete column 2. Make no entries in column 3.

a. *Week of* _____ *to* _____ Enter the beginning and ending dates of the work week in column 1; enter the number of days you actually worked during the week in column 2.

b. *Travel allowance* — Enter the number of kilometers you traveled during the week in column 2.

c. *Other authorized payments* — If you claim reimbursement for other authorized expenses incurred during performance of duty (bus fare, bridge tolls, telephone charges, etc.), specify the type in column 1 and the total amount in column 2.

Signatures — To certify your pay authorization, sign your name as "Field Supervisor" and enter the date.

[illegible]

[illegible]

[illegible]

Exhibit V-3-1. ENUMERATOR'S REFERENCE MANUAL (PROVINCES), FORM A-50

The Enumerator's Reference Manual (Provinces) is reproduced in Part B of Unit V. See Agrostan: A Case Study for the 1970 World Census of Agriculture, Unit V, Part B. Data-Collection Procedures (Instruction Manuals), Series ISP 2, No. 1-g.

Exhibit V-3-2. ENUMERATOR'S REFERENCE MANUAL (NORTHERN TERRITORY), FORM A-51

The Enumerator's Reference Manual (Northern Territory) is reproduced in Part B of Unit V. See Agrostan: A Case Study for the 1970 World Census of Agriculture, Unit V, Part B. Data-Collection Procedures (Instruction Manuals), Series ISP 2, No. 1-g.

Exhibit V-3-3. OUTLINE OF GUIDE FOR TRAINING ENUMERATORS

(Applies to Provinces only; for the Northern Territory, timing and content would be adjusted accordingly)

Day and period	Subject	Day and period	Subject
27 December, morning	<p>Foreword: Includes instructions to trainer on how to use the guide, preparation for training, training techniques, etc., and a detailed timetable by hours.</p> <p>1. Introduction and orientation to job</p> <p>a. Opening remarks</p> <p>b. Objectives of 1971 Sample Census of Agriculture</p> <p>c. Significance of oath of office</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Administer the oath of office to the trainees; have them sign the Application and Personnel Form for Temporary Field Service.</p> </div> <p>d. Use of Identification Card (Form A-203)</p> <p>e. Conditions of employment</p> <p>f. Confidentiality of information</p> <p>2. Preview of training program</p> <p>a. Introduction to enumerator's job</p> <p>b. Illustrative interview with filled questionnaire</p> <p>c. Introduction to Enumerator's Reference Manual--Provinces (Form A-50)</p> <p>d. Introduction to assignment materials for one PSU</p> <p>e. Introduction to Enumerator's Workbook--Provinces</p> <p>3. How to canvass a PSU</p> <p>a. Definition of canvassing</p> <p>b. How to read and use maps</p> <p>(1) Becoming oriented (use of "north" arrow)</p> <p>(2) Interpreting the legend and scale</p> <p>(3) Estimating distances</p> <p>(4) Identifying boundaries</p> <p>(5) Correcting or adding new names to map</p>		<p>c. Canvassing procedures</p> <p>d. Use of arrows to show direction of travel</p> <p>4. Definition and purpose of listing</p> <p>5. Use of Listing Book (Form A-2a)</p> <p>6. Terms pertaining to listing</p> <p>a. Housing unit</p> <p>b. Household</p> <p>c. Agricultural operation</p> <p>d. Holding</p> <p>e. Holder</p> <p>f. Method of operation</p> <p>g. Unit of area</p> <p>h. Summary of terms and definitions on page 2 of Listing Book</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Have trainees complete Workbook Exercise No. 1 on terms used in listing and measuring distances.</p> </div> <p>7. Filling items in Listing Book</p> <p>a. Columns 2, 3--Identification of household head and housing unit location</p> <p>b. Columns 4, 5--Determination of agricultural operation</p> <p>c. Columns 6, 7--Determination of separate holdings and method of operation</p> <p>d. Columns 8 to 12--Area of land in holding</p> <p>(1) Conversion of other units of measure to hectares</p> <p>(2) Conversion table on page 2 of Listing Book</p>

Note: Only those portions of the outline marked with an asterisk (*) are presented in exhibit V-3-4.

Exhibit V-3-3. OUTLINE OF GUIDE FOR TRAINING ENUMERATORS--Continued

Day and period	Subject	Day and period	Subject
	<p>Instructions to trainer: Have trainees complete Workbook Exercise No. 2 on "conversion".</p> <p>e. Column 13--Name of holding f. Column 14--Area of land in specific crop g. Column 15--Number of cattle and calves on holding h. Column 16--Respondent i. Columns 17 to 19--For supervisor's use j. Column 20--Date A-1 completed k. Column 21--For supervisor's use l. Column 22--Completion of listing line, callback notes, explanations, etc.</p> <p>8. Completion of listing a. Page totals for columns 7 to 12 and column 18 b. Transcription of page totals to summary page--inside back cover of Listing Book c. Consistency in page totals</p> <p>Instructions to trainer: Conduct a talk-through exercise covering the listing of a small portion of a training map in the Enumerator's Workbook.</p>		<p>(2) Light and dark type (3) Introductory statements (4) Skip instructions (5) Code boxes and write-in entries (6) "Catch-all" questions (7) Space for numerator of fraction (8) "None" boxes</p> <p>Instructions to trainer: Ask trainees to examine the A-1 to recognize the different kinds of type, introductory statements, skip instructions, etc.</p> <p>11. Heading items--A to F a. Information about holder--name, Listing Book page and line number, preliminary A-1 number b. Information about location--Province name and code, district name and code, PSU number</p> <p>12. Section I, general information a. Unit of area--importance of selecting an appropriate unit b. Method of operation (1) Relationship to entry in Listing Book (2) Effect on skip pattern (3) Identification of partner, employer, tribe or clan</p> <p>13. Section II, tenure of holding *a. Introductory statement (1) Meaning of tenure (2) Importance of the statement (3) Definition of communal land and public grazing land *b. Purpose of the several questions on tenure *c. What land to include in holding *d. Holdings consisting of single parcels or several parcels *e. Discussion of questions 5 through 10</p>
27 December, afternoon	<p>9. When to fill an A-1 Questionnaire</p> <p>10. Overall look at the A-1 a. Purpose of each section b. General instructions about format (1) Shaded areas</p>		

Exhibit V-3-3. OUTLINE OF GUIDE FOR TRAINING ENUMERATORS--Continued

Day and period	Subject	Day and period	Subject
	<p>Instructions to trainer: Sketch on the blackboard a holding with land owned, rented from and rented to--to illustrate the amount remaining in the holding. Show how the amount rented out would have a chance of being reported by another holder.</p> <p>*f. Discussion of questions 11 to 14 *g. Discussion of question 15 *h. Discussion of question 16</p> <p>Instructions to trainer: Illustrate separate parcels of a holding; show how they must be clearly separated from the remainder of the holding.</p> <p>*i. Significance of question 17--year first operated the holding *j. Review of Sections I and II</p> <p>Instructions to trainer: Have trainees complete Workbook Exercise No. 3 for Section II; also, complete Sections I and II of the practice interview.</p>		<p>d. Procedure for asking questions 18 to 56 (1) When to ask subquestions (a) and (b) (2) How to record production (3) Consistency between area and production questions e. Purpose of "other" category--the "catch-all" questions f. Use of "None" box following 24, 27, 32, 40, 43, 45, 46, 54, 55, and 56 g. Two or more cuttings of same crop h. Total area entry for each general category i. Total crop area for question 57</p> <p>Instructions to trainer: Have trainees complete Workbook Exercise No. 4 for Section III; also, complete section III of the practice interview.</p>
		28 December, morning	<p>15. Section IV, permanent crops a. Definition of "permanent" crops (1) Comparison with "temporary" crops harvested (2) Length of growing season for various crops b. Discussion of introductory statement c. Categories of permanent crops d. Procedure for asking questions 58 to 81 (1) When to ask subquestions (a), (b), and (c) (2) Area and number of trees in compact and scattered plantings (3) How to record production (note the different time references for production) (4) Consistency between area and production questions e. Purpose of "other" category--the "catch-all" questions f. Use of "None" box following 60, 69, 77, 78, 79, 80, and 81 g. Total area entry for each general category h. Total crop area for question 82</p>
			<p>14. Section III, temporary crops harvested a. Definition of "temporary" crops b. Discussion of introductory statement c. Categories of temporary crops</p>

Exhibit V-3-3. OUTLINE OF GUIDE FOR TRAINING ENUMERATORS--Continued

Day and period	Subject	Day and period	Subject
	<p>Instructions to trainer: Have trainees complete Workbook Exercise No. 5 for Section IV; also, complete Section IV of the practice interview.</p> <p>16. Section V, interplanted and succession crops</p> <ol style="list-style-type: none"> Discussion of interplanting Discussion of explanation for question 83 on the A-1 questionnaire, including how to answer sub-questions (b), (c), and (d) <p>Instructions to trainer: Ask a trainee to find the instruction for question 83 in the Enumerator's Reference Manual and read the paragraph. Sketch some tracts (or fields) on the blackboard (or use a previously prepared chart) to illustrate interplanting, including examples of crops planted at normal distance and others at other-than-normal distances. Explain relationship to entries in Sections III and IV.</p> <p>c. Explanation of succession cropping</p> <ol style="list-style-type: none"> Contrast with interplanting Filling item (b) and computing the total for 84(b), explaining why first line of 84(b) is not to be filled <p>Instructions to trainer: Illustrate succession cropping; ask several trainees to give examples. Have trainees complete Workbook Exercise No. 6 for Section V; also, complete Section V of the practice interview.</p>		<p>17. Section VI, land utilization</p> <ol style="list-style-type: none"> Relationship between "crop area" reported in Sections III and IV and "land area" referred to in Section VI Importance of reporting area once and only once in subquestions 85(a) to (g) Reconciling item 85(h) with item 85 Transcribing total crop area from 57 and 82 Computing amount of duplicated area Determining land area for 86(c) <ol style="list-style-type: none"> Comparing with 85(a) Resolving discrepancies <p>18. Section VII, irrigation and fertilization</p> <ol style="list-style-type: none"> Definition of irrigation Relationship between total land irrigated and irrigated land under crops Definition of chemical and commercial fertilizers <p>Instructions to trainer: Have trainees complete Workbook Exercise No. 7 for Sections VI and VII; also, complete Sections VI and VII of the practice interview.</p> <p>19. Section VIII, livestock and poultry</p> <ol style="list-style-type: none"> Discussion of introductory statement <ol style="list-style-type: none"> Animals owned by holder or employer Animals on communal or public grazing land Animals kept on holding Categories of livestock <ol style="list-style-type: none"> Animals on hand at time of enumeration Animals milked yesterday Animals for transport or draft purposes at any time last year Total categories and subcategories by age and sex Use of "None" box following 96, 99, 102, and 107

Exhibit V-3-3. OUTLINE OF GUIDE FOR TRAINING ENUMERATORS--Continued

Day and period	Subject	Day and period	Subject
	<p>Instructions to trainer: Have trainees complete Workbook Exercise No. 8 for Section VIII; also, continue with Section VIII of the practice interview.</p>		<p>d. Determining number of other households on holding</p> <p>23. Section XII, hired workers</p> <p>a. Meaning of working "for pay in cash"</p> <p>b. Exclusion of family members living in household</p> <p>c. Determining amount of work done by hired workers and amount paid</p> <p>24. Section XIII, source of income</p> <p>a. Definition of gross income</p> <p>(1) Income from all sources before deductions</p> <p>(2) Family members living in household</p> <p>b. Description of income from "other" sources</p> <p>Instructions to trainer: Have trainees complete Workbook Exercise No. 10 for Sections XI, XII, and XIII; also, complete the practice interview.</p>
28 December, afternoon	<p>20. Section IX, sale of agricultural products</p> <p>a. Definition of agricultural products</p> <p>b. How to help the respondent estimate the amount of sales</p> <p>c. Explanation of the skip pattern</p> <p>21. Section X, power, equipment, transport facilities</p> <p>a. Explanation of use of electric current</p> <p>b. Definition and illustrations of types of agricultural power</p> <p>c. Explanation of skip pattern after question 110(b)</p> <p>d. Types of equipment used last year on holding regardless of ownership (question 111)</p> <p>e. Vehicles now kept on holding regardless of ownership (question 112)</p> <p>Instructions to trainer: Have trainees complete Workbook Exercise No. 9 for Sections IX and X; also, continue with Sections IX and X of the practice interview.</p>		<p>25. Use of "notes" space</p> <p>a. For arithmetic computations</p> <p>b. For explanation of unusual situations</p> <p>c. For sketching fields or parcels to explain entries on the questionnaire</p> <p>26. Section XIV, enumerator's record</p> <p>a. Recording date of each visit to the household and pertinent explanatory remarks</p> <p>b. Name of principal respondent and his relationship to the holder</p> <p>c. Recording noninterview reason for households not interviewed</p> <p>d. Recording date completed and signature</p> <p>27. Reviewing the A-1</p> <p>a. Check for completeness</p> <p>b. Check for consistency</p>
	<p>22. Section XI, characteristics of holder's household</p> <p>a. Relationship between housing unit and household</p> <p>b. Determining names, relationship, and ages of household members</p> <p>c. Inclusion of hired workers and nonrelatives in household</p>		

Exhibit V-3-3. OUTLINE OF GUIDE FOR TRAINING ENUMERATORS--Continued

Day and period	Subject	Day and period	Subject
	<p>28. Interviewing techniques</p> <ol style="list-style-type: none"> Introduce yourself and show identification card Explain purpose of the interview Be prepared to answer questions about the 1971 Sample Census of Agriculture Interview a reliable respondent Be prepared to ask the first question and start the interview immediately Ask the questions as worded and in the order prescribed on the questionnaire Be patient and courteous Thank the respondent at the end of the interview <p>29. How to handle special enumeration situations</p> <ol style="list-style-type: none"> No one at home on first visit Number of callbacks required Vacant units Noninterview situations <ol style="list-style-type: none"> Refusal Occupants temporarily away No reliable respondent available <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Have several trainees act as enumerator while you act as respondent for a complete mock interview (Appendix B of Enumerator's Reference Manual). Have all trainees fill an A-1 on the basis of the interview. Have trainees comment on the interview.</p> </div> <p>30. Use of Problem Referral (Form A-101) by enumerators</p> <ol style="list-style-type: none"> To report map problems To obtain clarification of instructions To report problem situations and how they handled them To inquire about or report on administrative matters 		
29 December, all day	<p>31. Practice enumeration</p> <ol style="list-style-type: none"> Discussion of plan to carry out practice listing and interviewing <ol style="list-style-type: none"> Assignment in pairs Taking turns in listing and interviewing Observing and assisting each other Arrangements to meet supervisor <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Assign enumerators to work in pairs. Give them a sketch of the area to be covered, one Listing Book marked "TRAINING", three A-1 "TRAINING" questionnaires for each and two Problem Referral forms. Arrange to meet and observe them while listing and again while filling the A-1; offer constructive comments and assistance.</p> </div>	29 December, morning	<p>32. Discussion of field experience</p> <ol style="list-style-type: none"> Problems encountered Review of Listing Book entries which were misunderstood Review of A-1 items which were generally misunderstood Use of Enumerator's Reference Manual <p>33. Enumeration of National Certainty holdings</p> <ol style="list-style-type: none"> How assigned How to locate How to review the A-1 questionnaires filled by the holder and complete if necessary <p>34. Administrative instructions</p> <ol style="list-style-type: none"> Scheduling appointments with supervisor Observation and review of work Daily hours of work
		30 December, afternoon	

Exhibit V-3-3. OUTLINE OF GUIDE FOR TRAINING ENUMERATORS--Continued

Day and period	Subject	Day and period	Subject
	d. Pay authorizations <ul style="list-style-type: none"> (1) How and when issued (2) Where to cash them (3) Training fee (4) Travel allowance (5) Other expenses e. Communication with supervisor between visits <ul style="list-style-type: none"> f. Reporting accidents and injuries g. Initial assignment h. Additional assignments and NC holdings i. Materials in portfolio 		<div style="border: 1px solid black; padding: 10px; margin-bottom: 10px;"> <p>Instructions to trainer:</p> <p>Distribute materials to each enumerator. Arrange for first visit--date, time, and place and have trainees record on the portfolio label. Record your appointments in your Record Book. Stress importance of keeping appointments. Collect and destroy forms used in the practice enumeration.</p> </div> 35. Closing remarks <p>-----</p> <p>*Practice interview and mock interview</p>

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS

Outline	Narrative
13. Section II - Tenure of holding	<p>In Section II, we are primarily concerned with what land will be included in this holding and its tenure. We do this by first asking the respondent how much land he owns, rents in, or operates on a rent-free basis. From this, we subtract any land that the respondent rents out to others or allows someone else to operate. The land that is left constitutes the holding for which the questionnaire is being completed.</p>
	<p>Since the questions on crops and other items are based specifically on the land in this holding, it is very important that Section II be correct. Failure to properly define the holding in Section II will lead to serious inconsistencies in the remainder of the questionnaire.</p>
a. Introductory statement	<p>As stated previously, the method of operation checked in question 1(b) of Section I determines where you will start in Section II.</p>

Question: If the method is "on own account" or "in partnership," where do you begin Section II, Mr._____?

 Answer: The introductory statement at the beginning of Section II.

Mr._____, will you please read the introductory statement for a holding operated "on own account."

Follow questionnaire.

As we have just said, for a holding operated "on own account," you would go from 1(b) to the top left introductory statement of Section II. After reading the statement, you would continue with question 5.

For holdings operated "in partnership," you would read the introductory statement at the top right of Section II. Please read this statement, Mr._____.

Follow questionnaire.

As you see, the main emphasis is to inform the respondent that the questions apply to all land in the partnership -- not just his share.

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
<p>(1) Meaning of tenure</p> <p>(2) Importance of the statement</p> <p>(3) Definition of communal land and public grazing land</p>	<p>As we said, Section II determines the different tenures of land in the holding. We define tenure as the manner by which land or property is held, or how permission is acquired to use land or property.</p> <p>The introductory statement is designed to suggest to the respondent what land he is to <u>include</u> and <u>exclude</u> from his answers. The statement will help the respondent bring to mind all separate tracts and fields that are used for agricultural production.</p> <p>The instruction on the questionnaire tells us to exclude communal land and public grazing land which is used jointly with others. This means that if the holder does <u>not</u> have the sole right to use the land, it should <u>not</u> be included in Section II. This may be cropland on which crops are grown jointly for a tribe or commune, or it may be pasture or grazing land on which anyone can graze livestock.</p>
	<p>Are there any questions concerning the introductory statement?</p> <div style="border: 1px solid black; padding: 10px; text-align: center; margin: 10px auto; width: fit-content;"> <p>Answer any questions.</p> </div>
<p>b. Purpose of the several questions on tenure</p>	<p>We have said that one primary purpose of Section II is to establish the area of this holding. We do not approach it by asking for the total land in the holding but rather by asking about individual pieces according to tenure. The pieces are basically land owned, plus land rented <u>from</u> others or used rent-free, minus land used <u>by</u> others. The end result is the land in the holding which is operated or controlled by the holder or operator. We use the different forms of tenure as building blocks to determine the total land in the holding. There is less chance for a respondent to forget about a separate tract or field if he answers on a step-by-step basis.</p>
<p>c. What land to include in holding</p>	<p>When you ask the tenure questions, keep in mind that the areas reported should be the total area owned, rented from others, etc. This means that the place where the holder lives and all separate tracts and fields are to be included. Do <u>not</u> include land and buildings which are used for cotton gins, sugar mills, canning factories, hospitals, prisons, etc.</p>
<p>d. Holdings consisting of single parcels or several parcels</p>	<p>A holding may consist of only one parcel or tract of land. However, various forms of tenure may be applicable to this one parcel. Accordingly, all land making up the one parcel should be reported in Section II under the appropriate forms of tenure. If a holding consists of two or more separate tracts of land, they should all be</p>

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
	reported, regardless of their location. Some tracts may be outside your PSU, or even in another district. Nevertheless, they must be reported in Section II for the holding you are enumerating.
e. Discussion of questions 5 through 10	Let's take a look at the tenure questions in Section II for holdings operated "on own account" and "in partnership."
(1) Question 5	Please read question 5, Mr._____.
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Follow questionnaire. </div>
(a) Owned land	All land owned should be reported in 5. Land owned implies that the holder, or member of his household, has title to the land and has the right to determine how it is to be used. He generally has the right to transfer title by sale or some other arrangement.
(b) Types of owner-like possession	Land held in ownerlike possession is different from land owned in that the holder does not have legal title to the land. Let's find the discussion about ownerlike possession in your Reference Manual.
	<div style="border: 1px solid black; padding: 10px; text-align: center;"> Allow time to find the paragraphs. Read the following portions aloud. </div>
	(1) Land operated under perpetual lease, hereditary tenure, or under long-term leases usually ranging from 30 to 99 years, and for which rent is sometimes only nominal. (2) Land which, without legal title of ownership or long-term lease, has been uninterruptedly operated by a holder for a period of over 30 years without payment or rent. (3) The system under which a villager receives a plot of land, rent-free, from tribal, ejidal, or other communal land and retains it as long as he keeps it under cultivation by his own labor or that of his family, and under which he cannot sell or mortgage the holding.
	<div style="border: 1px solid black; padding: 10px;"> <p>Question: As a holder, I tell you I use 3 hectares of land for farming. I have no legal title to the land, but the same land has been used by my family for at least 50 years. Would you report this land in question 5, Mr.____?</p> <p>-----</p> <p>Answer: Yes. This is an example of land used uninterruptedly for over 30 years.</p> </div>

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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(c) Location
and types
of land
to include

We want the holder to report all land owned or land held in ownerlike possession, regardless of its location. This land may include cropland, pastureland, woodland, or wasteland. The holder should include all land owned by his wife or other members of his household who do not themselves operate a separate holding.

For own-account operations, the holder must report in question 5 all land owned or held in ownerlike possession which is used for agricultural production even if he tells you someone else uses the land.

For partnership operations, include all land used in the partnership that is owned by members of the partnership. Therefore, do not include owned land which is not used in the actual partnership operation.

Question: You are completing a questionnaire for a partnership. In answer to question 5, the respondent tells you he has 6 hectares he owns, 4 hectares of which are used in the partnership. The other 2 hectares are used in his own separate holding. How many hectares would you report for the partnership in question 5, Mr._____?

Answer: 4 hectares. Only owned land used in the partnership is to be included in a partnership questionnaire.

Since there are two separate holdings, they would be reported separately -- the 4 hectares for the partnership and 2 hectares for the holding operated on own account.

Question: In answer to question 5, a respondent tells you he owns 7 hectares, but 3 hectares are rented to a neighbor. How many hectares would you enter in question 5, Mr._____?

Answer: 7 hectares. All owned land used for agricultural production must be reported in 5.

Are there any questions about 5?

Answer any questions.

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
(2) Question 6	Question 6 deals with land rented <u>from</u> others. It asks, "How much land do you rent <u>from</u> others for cash or share of the crop or live-stock production?"
(a) Definition of rented land	<p>Basically, land rented is defined as land used by the holder, the use of which generally results from an agreement between the holder and a second party. The privilege of use of the land may or may not carry with it a charge or obligation on the tenant's part. Question 6 deals with land rented from others for which a charge is made for use of the land.</p> <p>Take a few minutes now to use the index of your Reference Manual and find the paragraph which is concerned with land rented from others. Then read this paragraph for yourself.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Allow time to read the paragraph.</p> </div> <p>If you receive a "none" answer to 6, your instructions are to skip to 7. Assume a respondent tells you he rents 20 hectares from his father. Question 6a would be asked in this manner:</p> <p style="padding-left: 40px;">"For the 20 hectares you rent from your father, what did you agree to pay as rent for the year?"</p> <p>Whenever a question includes the phrase, "amount in 6," "amount in 8," etc, in light italics, you are to refer to that question and substitute the previously entered amount in the statement. In the example I just gave, I substituted the entry of 20 hectares from question 6.</p>
(b) Types of rental payments	<p>Check the appropriate box for type of rental arrangement, and ask about the amount paid--cash, or share of production, or a combination of both. If the holder pays something other than cash or a share of the production, report it under "other" and specify the payment. Examples are "2 pigs" or "10 quintals of rice." These are cases where payment is set in advance and not a definite share of the crops.</p> <p>If a respondent indicates he rents land for which he pays the taxes as rent, delete your entry in 6 and put it in 7b. Indicate to the respondent that we have a question covering that situation and then include the land in question 7b.</p>

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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Are there any questions about 6 or 6a?

Answer any questions.

(3) Question 7

Question 7 involves land used on some basis other than for cash or share of production. Let's look at items a, b, and c. We first ask the respondent for land used on a squatter basis. Land used on a squatter basis is land used generally without consent of the owner. The owner may not be aware of the fact that the land is being used. This is particularly true with government land. The owner may tolerate the action, even though he does not consent to it. Basically there is no agreement between the owner and the user of land used on a squatter basis.

Question: Can anyone think of a case where land used on a squatter basis should be considered as land held in ownerlike possession?

Answer: When the same land has been used for more than 30 years and use of the land has been uninterrupted during that time.

In this case you would report the land in question 5, not in 7.

Question 7b asks about land used in exchange for services, upkeep of land, payment of taxes, etc. If a person uses land in exchange for milking the owner's goats, this is using land in exchange for services. If the owner lets a person use land as long as he keeps down the weeds, this is considered upkeep of land; or the person may pay the owner's property taxes in exchange for use of the land.

Question: Can anyone think of an example that would go into the "other" category of question 7?

Answer: Land belonging to a relative who allows the holder to use it rent-free, without payment of any kind.

Are there any questions about 7?

Answer any questions.

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
(4) Question 8	<p>The sum of the amounts in 5, 6, and 7 gives the total area of land which is available for use by the holder. We can call this the "<u>incoming</u>" land. However, the holder may not use all this land. Instead, he may rent part of it to others or allow others to use it on some other basis. In other words, there may be some <u>outgoing</u> land. Our objective in question 8 is to identify the outgoing land and remove it from this holding.</p> <p>It is necessary to ask all parts of question 8a, b, and c to be sure all land used by others is reported. Take a minute to read question 8 to yourselves.</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Allow time to read the question.</p> </div>
(a) Use of land by others	<p>Report in 8a all land that the holder rents to others, either for cash or a share of the production. Also report land assigned to tenants or sharecroppers in 8a, even if the landlord directed the agricultural operations.</p> <p>In 8b, report land used by others on a squatter basis, in exchange for services, upkeep of land, payment of taxes, etc.</p> <p>In 8c, report any land that is managed for this holder by his hired manager.</p> <p>Land to be reported in 8a, b, or c should include cropland, pasture-land, woodland, wasteland and any other land that the holder rents out or allows others to use, regardless of the location of the land. Land reported in 8a, b, or c should have been previously reported in 5, 6, or 7.</p> <p>Are there any questions about 8?</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Answer any questions.</p> </div>
(b) Rental agreements	<p>Let's take a few minutes to discuss leases or other agreements for use of land and problems which can arise when talking about leases or rental agreements. If an agreement is in writing with a specified expiration date, the land and the agricultural activities on that land should be reported by the person who has possession of the land at the time of enumeration. There is generally no problem in deciding how this land should be reported. Some problems do arise,</p>

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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however, in reporting use of land where there is no written agreement. Let's read what your Reference Manual says about it.

Allow time to find the paragraphs. Read the following portions aloud.

- (1) If a person has been renting or using the same land for several years on a season-to-season basis or on a year-to-year agreement, and this person expects to operate the tract in 1972, then he should report the land.
- (2) If a person has rented land during the year, and he is still using it at the time of enumeration, then he should report the land.
- (3) If the landlord or owner has taken control of the land before the date of enumeration, then the land should be reported as part of the landlord's holding.
- (4) If the land in question is usually leased or rented, but an agreement has not yet been reached regarding its disposition for the 1972 season, the land should be considered under the control of the person who used it in 1971.

As you can see, in the absence of a written rental agreement for use of land, the general effect of these rules is to have the land reported by the person you would normally expect to report it, and who would know the most about it. Generally, there must be some definite action to indicate that an agreement has been terminated, before the land is reported by the owner or landlord.

Are there any questions about who should report land which is rented from or to others?

Answer any questions.

Notice that there is an instruction below 8c telling you that if no land is reported in 8a, b, or c, you are to skip to 10; question 9 would not be applicable.

(5) Question 9

Let us continue with question 9. If any land is reported in 8 as rented to or used by others, you are to ask question 9. Before asking question 9, you must add the entries in 8a, b, and c to get the total area rented out or used by others. Then use this total in asking question 9. For example, assume I am enumerating and I

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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have a total of $4 \frac{4}{10}$ hectares reported in 8a, b, and c. I would ask question 9 in this manner:

"Of the $4 \frac{4}{10}$ hectares reported as used by others, how much do you own or hold in ownerlike possession?"

Does everyone understand how to ask question 9?

Answer any questions.

(a) First
practice
example--
questions
5 to 9

Let's try a little practice now in filling Section II -- questions 5 through 9. I'll be the respondent and I'll ask one of you to be the enumerator. Everyone please take an A-la questionnaire, mark TRAINING in the top margin, and fill Section II as we go along. We will use this same questionnaire for several examples.

Allow time to get the
A-la ready.

We'll assume Section I has been completed and my holding is operated "on own account." Will you please start, Mr. _____?

If the enumerator fails to read the introductory statement, stop him and have him read it before asking question 5. If he makes a mistake, correct him by asking him or the class for the correct way to ask a question. Give the following data in response to the enumerator's questions:

5 - $12 \frac{4}{10}$ hectares	8a - $2 \frac{4}{10}$ hectares
6 - $4 \frac{1}{10}$ hectares	b - None
6a - Cash only; \$75	c - None
7a - None	9 - $2 \frac{4}{10}$ hectares
b - None	
c - None	

Mr. _____, will you please read the entries you made for this interview, so we can all check our entries. Just give us the question number and the entry you have.

After entries have been checked, comment on how enumerator followed the skip pattern, how he handled question 9, and so on. Answer any questions the trainees may ask.

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
(b) Second practice example -- questions 5 to 9	Let's go through another practice example for questions 5 to 9 in Section II. Again, I'll be the respondent and all of you will make the appropriate entries. Draw a line through the previous entries in 5 to 9 and use the same questionnaire. In this case, you have determined that my operation is "in partnership." Mr. _____, will you please act as the enumerator.

Follow the same procedure as for the first practice example.

Give the following data in response to questions:

5 - 6 $\frac{3}{10}$ hectares	8a - None
6 - 4 $\frac{2}{10}$ hectares	b - $\frac{2}{10}$ hectare
6a - Share of production only; 1/3 of the crops	used rent-free by father who has own holding
7a - None	c - None
b - 2 $\frac{8}{10}$ hectares	9 - All of it
c - None	

Thank you. Mr. _____, will you please read your entries for questions 5 through 9, and we will all check our entries with yours.

Review the answers, comment on the enumerator's interviewing procedure and answer any questions.

(6) Question 10

With the completion of questions 5 through 9, we are now prepared to establish the land in this holding for question 10. Land in this holding is the total of 5, 6, and 7, minus the total amount in 8. This amount in 10 is the total land operated by the person in charge of this holding.

Do not ask the respondent for this figure. Calculate the entry yourself from the figures in questions 5 through 8. Read to the respondent the sentence in boldface type. As you do, repeat the area figures entered in 5, 6, 7, and 8 to give the respondent a chance to check the information he has given you.

Let me emphasize again, the area figure in 10 is the amount of land in this holding and the remaining questions on the questionnaire refer to this land only.

Let me go through an example of how question 10 should be read, using the entries you just made in questions 5 through 8 in the last practice example. You can use the space to the left of questions 5

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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to 8 to do some calculating. Look at your entries in questions 5 to 8 as I read question 10:

"Taking the $6 \frac{3}{10}$ hectares owned, adding the $4 \frac{2}{10}$ hectares rented from others, adding the $2 \frac{8}{10}$ hectares you operate rent-free, then subtracting the $\frac{2}{10}$ of a hectare operated by your father, we get $13 \frac{1}{10}$ hectares. The $13 \frac{1}{10}$ hectares is all the land in this holding, even though part of it may be located elsewhere. The remaining questions refer to these $13 \frac{1}{10}$ hectares."

To clarify this procedure, I'll illustrate how we determined the amount of land in the holding.

Sketch the holding on the blackboard, and indicate the part of the land owned, the part rented from others, the part used rent-free, and the part which the father operates. Show how the amount used by the father would have a chance of being reported by him.

f. Discussion of questions 11 to 14

You will recall that if you are completing this questionnaire for a hired manager or for a chieftain, you do not ask questions 5 through 10. Instead, you complete questions 11 through 14. In these cases you will, of course, read the introductory statement which appears just above question 11. Mr. _____, please read that statement for us.

Follow questionnaire.

(1) Question 11

Question 11 asks for all the land managed or supervised for others, either as a hired manager or as a chieftain. You will notice that parts of questions 11 to 14 have brackets around them. The brackets enclose the words that apply specifically to a hired manager or to a chieftain. Read whichever bracketed statement is appropriate.

The sequence of questions for a hired manager or a chieftain is somewhat different from that for a holding operated "on own account" or "in partnership." It is quite likely that a person managing or supervising land for others will know the exact amount of land which he manages or supervises. Therefore, it is not necessary to ask for the detail reflected in questions 5, 6, and 7. The figure in 11 corresponds to the total of 5, 6, and 7 obtained for own-account and partnership holdings.

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
(2) Question 12	Question 12 is asked next to determine the area of land rented out or used by others. Please refer again to the index of your Enumerator's Reference Manual and find the paragraphs which discuss the instructions for question 12.
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Allow time to find the paragraphs. Call on one of the trainees to read it aloud. </div>
(a) For hired manager	When you ask question 12, you should read the first bracketed portion if the holding is operated by a hired manager. Will you read the question, Mr. _____, assuming that the amount in 11 is 40 hectares and the holding is operated by a hired manager.
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Follow questionnaire. </div>
	In question 12, then, you ask about the <u>outgoing</u> land -- the land rented out or otherwise operated by others. This outgoing land will be subtracted from the total which was given in answer to question 11.
(b) For chieftain	If the holding is operated by a chieftain, you would read the second bracketed portion of question 12. Will you read question 12, Mr. _____, assuming that the amount in 11 is 75 hectares and the holding is operated by a chieftain.
	<div style="border: 1px solid black; padding: 5px; text-align: center;"> Follow questionnaire. </div>
	As you see, question 12 determines how much of the total land supervised by the chieftain is rented out or specifically assigned to members of the tribe who would report such land as part of their separate holdings.
(3) Question 13	Question 13 is similar to question 10. The outgoing land in 12 is subtracted from the total in question 11. Thus, question 13 establishes the amount of land in the holding, and the remaining questions refer to this amount.
(4) Question 14	After you have determined the net amount of land making up this holding, you will ask question 14. The four subquestions will show the tenure under which this land is held by the <u>employer or the tribe</u> .

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
	<p>It is important that you make clear to the respondent that you are referring to the amount of land in question 13, not the total in question 11. Note that the sum of the entries in 14a to 14d must equal the amount in 13.</p> <p>Let's have some practice now in making entries for holdings operated as hired manager or as chieftain. Again, I'll ask one of you to act as the enumerator and I'll be the respondent. We will assume Section I has been completed. Take the same training questionnaires, cross out your entries in questions 5 to 10, and make the appropriate entries for questions 11 to 14.</p>

- (a) Third practice example -- questions 11 to 14

For the first case, write "Delhi Tribe" in 4a of your questionnaire.

Write on blackboard:
4a. Delhi Tribe

Mr. _____, will you please be the enumerator for questions 11 through 14. Be sure to read the introductory statement and use questions and wording that apply to a chieftain.

Again, if the enumerator makes a mistake, ask him to correct it. Review the answers with the trainees.

Give the following data in response to questions:

11 - 134 hectares	14a - 41 hectares
12 - 93 hectares	b - none
13 - (Enumerator should get 41 hectares)	c - none
	d - none

In the example we just discussed, the 134 hectares represent the total amount of land the chieftain supervised for the tribe. Of this total, 93 hectares are assigned to members of the tribe and these hectares would be reported by them as land in their holdings. The 41 hectares that are not assigned would be communal land which is to be reported by the chieftain.

- (b) Fourth practice example -- questions 11 to 14

Let's have one more practice example for questions 11 to 14. Draw a line through the entries you just made and use the same questionnaire. In question 3a, enter "Diamond Rubber Plantation."

Write on blackboard:
3a Diamond Rubber Plantation

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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Will you please act as the enumerator for this holding which is operated by a hired manager, Mr. _____?

Follow same procedure as for the previous practice example.

Give the following data in response to questions:

- 11 - 320 hectares
- 12 - 80 hectares
- 13 - 240 hectares
- 14a - 200 hectares
 - b - 120 hectares (later corrected to 40 hectares)
 - c - None
 - d - None

Comment on how the enumerator handled question 14:

Did he ask additional questions and correct 14b, or was it necessary for him to verify 11 to 13?

Remember, the entries in 14a through d must add up to the entry in 13, not 11. Do all of you understand why we had to correct the entry in 14b?

Answer any questions.

g. Discussion of question 15

The next two questions--15 and 16--are to be completed for all holdings. These questions are concerned with the location of the holding, and the number of separate parcels in the holding. For holdings operated "on own account" or "in partnership," you are instructed to skip from question 10 to question 15. For manager or chieftain holdings, you just continue in order from 14 to 15.

In question 15, you must determine whether or not all of the land in this holding is located in the district where you are enumerating, or whether part of the holding is in another district. If the respondent indicates that part of the holding is in another district, enter in 15a the amount of land which is in your assigned district; in 15b enter the name or names of the other districts concerned, and the area of the holding which is located in each. Again, be sure the respondent understands that you are referring only to the land actually counted as part of this holding. The sum of the areas reported in 15a and 15b, therefore, must equal the amount entered in 10 or 13.

h. Discussion of question 16

Question 16 provides information on fragmentation of holdings. Just as our government is concerned with how many holders own their land

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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and how much they own, it is concerned with the way in which many holdings are broken up. Fragmentation of holdings often results in inefficient operations and low production.

Question 16 asks whether there are any separate parcels of land in the holding. This means parcels which are completely separated from the remainder of the holding by water or land which is not part of this holding. If a creek runs through a holding and divides it, but the creek is also part of this holding, the two pieces are not considered separated. If, however, a public road or land belonging to someone else divides the holding into two or more parts, these are considered as separate parcels of land. Perhaps it is easier to show you.

Illustrate separate parcels of a holding.
Sketch an area of a PSU and then sketch a holding consisting of three separate parcels.
Point out how each parcel is clearly separated from the remainder of the holding.

If the response to 16 is yes, ask for the number of separate parcels and enter the number in 16a.

Are there any questions about 15 or 16?

Answer any questions.

- i. Significance of question 17 -- year first operated the holding

Question 17 asks when the holder began to operate any part of this holding. The year is the only answer necessary unless the holder began operating this holding sometime in 1971 or 1972. In that case you should also enter the month. The purpose of question 17 is partly to identify new operators. Make sure the respondent understands that you are talking only about the land included in this holding -- the amount in 10 or 13; also, that you are asking the year when the holder first began to operate any part of this holding.

The note on the questionnaire indicates that if the respondent started operating the holding during 1971 or 1972, it may be necessary for him to estimate crop areas and production or other items asked for on the questionnaire, since the information relates to the entire year, 1971. It is expected that the respondent will have

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
	<p>a good idea about the agricultural operations of the holding for the part of the year before he took charge.</p> <p>For a developing economy, it is also important to know something about the stability of agricultural operations. Answers to question 17 in conjunction with other characteristics of the holder will give some indication of stability and mobility.</p>
j. Review of Sections I and II	<p>The best way to review what we have learned about Sections I and II of the A-1 questionnaire is to <u>apply</u> what we have learned. We'll do that now with a workbook exercise and some practice interviewing.</p>
(a) Workbook Exercise 3	<p>Turn to Exercise 3 in your workbook. This is an exercise on Section II of the questionnaire. You will have about 20 minutes to complete the exercise; then we will go over the answers together and discuss any questions you might have.</p>

Use the Key to Exercise 3 in the Enumerator's Workbook to check the answers. Answer questions as necessary.

(b) Practice interview

Next we're going to start filling an A-1 questionnaire as part of a practice interview which will continue throughout our study of the questionnaire.

Turn to the "Practice Interview" in your Training Guide and follow it through Sections I and II of the questionnaire at this time.

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS--Continued

PRACTICE INTERVIEW--RAFAEL HOLDING

1. Introduction to interview

As I mentioned previously, part of your training will consist of practice in filling the A-1 questionnaire. This practice interview will be conducted as we study the questionnaire. After we study a section, we will stop and complete the interview for that part. I will act as the respondent; you will take turns acting as the enumerator. As we go through the exercise, each of you will fill a blank A-1a just as you would if you were enumerating. Mark TRAINING in big letters in the top margin of your A-1a. As I call on each of you, please continue from where the previous person left off. If any of you have any questions at any time, do not hesitate to raise them.

To start off, let's all complete the identification items at the top of the form. This information would come from the Listing Book, but I will write it on the blackboard for you to copy.

Write:

Name of holder--Ahmad Rafael
Listing Book reference--Page 1, line 2
Preliminary A-1a No.--2
Province name and code--Rajpur, code 10
District name and code--Ranchi, code 12
PSU No.--04

Mr. Rafael, according to the Listing Book, operates this holding on his own account. I am Mr. Rafael. Remember to introduce yourself properly; ask questions as worded and in order.

As you call on different enumerators, be careful not to follow a predictable pattern. The information you will give the practice enumerators is given in the following paragraphs together with some instructions on what you should look for and comment on. The exact dialogue is not prescribed; what you say will depend upon the situation. You must be prepared to interact with the enumerators, pointing out their errors and answering their questions. When acting as respondent, do not simply read the data given below. Simulate as nearly as possible an actual interviewing situation. Be uncertain and even unwilling now and then if the enumerator fails to win your cooperation. Check the answers with the trainees after each portion of the interview.

Now we are ready to begin. Mr._____, will you start please. I have come to the door in answer to your knock.

2. Enumerator's introduction

Before Mr._____ goes on with Section I of the questionnaire, I think we should stop to comment on his introduction. Was it too long, too short, too formal? What comment would you make about it, Mr._____?

Ask one or two persons to comment on the trainee's introduction. Did it cover the essential points? Did the trainee mention having been to the house before? Was the trainee persuasive? Refer the class to the Enumerator's Reference Manual, if necessary.

3. Section I, General information

Let us proceed now with Section I of the A-1a questionnaire, Mr._____.

Data for:

1a--Hectare
1b--On own account
2 to 4--Skip

What to look for and comment on:

Did the enumerator verify 1b or did he simply copy from the Listing Book?
Did he have any difficulty with the skip pattern?

4. Section II, Tenure of holding

Does anyone have any questions about any part of Section I? If not, let us proceed to Section II.

Data for:

5--17 hectares
6--6 hectares (Respondent rents 6 hectares from his brother for a share of the production. This is a separate piece of land.)
6a--Share of production only; 1/4 of production
7a--None
7b--None
7c--None
8a--None
8b--None
8c--None

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS--Continued

9--Skip
 10--23 hectares
 11 to 14--Skip
 15--No
 16--Yes
 16a--2
 17--1965

What to look for and comment on:

Did the enumerator read the correct introductory statement?

Did the enumerator do an adequate job of ascertaining facts about the land rented from the brother?

Did the enumerator read the statement in question 10 while doing the calculation?

Did the enumerator follow the skip pattern?

Did the enumerator make clear what land was being referred to in questions 15 and 16?

5. Section III, Temporary crops harvested last year

We are now ready to proceed with Section III of the A-1a questionnaire. As I mentioned before, it is important that you follow the wording and the instructions on the questionnaire. Will you please continue the interview, Mr. _____.

Data for:

18 to 24--None

25 to 27--None

28 to 32--None

33 to 38--No

40--Yes; sesame

6 hectares; 5,100 kilograms

(Total = 6 hectares)

41--No

42--Yes; 1 hectare

43--No

(Total = 1 hectare)

44 and 45--None

46--Yes; 2/10 hectare

(Total = 2/10 hectare)

47 to 49--No

50--Yes; 3/10 hectare

51 and 52--No

53--Yes; 4/10 hectare

54--No

(Total = 7/10 hectare)

55--No

56--No

57--7 9/10 hectares (Total to be obtained by enumerator by adding amounts in 18 to 56)

What to look for and comment on:

Did the enumerator read the introductory statement?

Did the enumerator follow correct procedure in each group of crops? That is, did he read the list through first, to get YES entries and then go back to get data on area and production?

Did the enumerator at some time remind the respondent that he was to report in hectares?

Did the enumerator reach clear understanding with the respondent on unit of measurement for production?

Did the enumerator add the area for each group and enter the total in the space provided?

6. Section IV, Permanent crops

Data for:

58--Yes; 5/10 hectare; 110 trees in compact plantings, no trees in scattered plantings; 7,300 kilograms

59 and 60--No

(Total = 5/10 hectare)

61--No

62--Yes; 6/10 hectare; 95 trees compact; no trees scattered; 2,930 kilograms

63 to 67--No

68--Yes; 4/10 hectare; 1,450 kilograms

69--No

(Total = 1 hectare)

70 to 77--No

78--Yes; strawberries; 4/10 hectare; 1,200 kilograms

(Total = 4/10 hectare)

79--Yes; 3 hectares; 7 metric tons

(Total = 3 hectares)

80--No

81--No

82--4 9/10 hectares (Total to be obtained by enumerator by adding amounts in 58 to 81)

Comment on same points as for Section III.

7. Section V, Interplanted and succession crops

Data for:

83--No (Act as if you do not understand what is meant by interplanting and succession cropping to see if the enumerator will explain it well.)

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS--Continued

84--Yes; strawberry patch (4/10 hectare) was plowed after spring harvest and planted to early maturing sweet corn (4/10 hectare)

What to look for and comment on:

Did the enumerator explain interplanting and succession cropping well?

In 84, did the enumerator correctly have a total of 4/10 hectare on last line of (b)?

8. Section VI, Land utilization last year

Data for:

85--23 hectares (transcribed from question 10)

85a--12 4/10 hectares

85b--3 hectares

85c--(2/10 hectare of the grapes were eaten by insects but the remainder were not affected. If the enumerator incorrectly enters 2/10 in 85c, do not correct him at this time.)

85d--None

85e--1 hectare

85f--5 hectares

85g--2 hectares

85h--(At this point, the sum of 85a through 85g is either 23 4/10 or 23 6/10, depending on how the enumerator handled the 2/10 hectare of grapes that failed. He must review his entries and make them add to 23 hectares as entered in 85.)

Try to lead the enumerator to estimate the amounts more exactly so that the total is reduced by 4/10. Assume that you agree that 85g should be 1 6/10. Then suggest that he should delete the 2/10 if he entered 2/10 in 85c, since it is already included in 85a.

86a--12 8/10

86b--4/10

86c--12 4/10

Note that the entries for questions 85a to 85h refer to land area, but that questions 86a to 86c refer to crop area. Where there is no interplanting or succession cropping, the land area and crop area would be the same. Note also that, while 86a to 86c are not direct questions, the respondent should follow along with the enumerator.

What to look for and comment on:

Did the enumerator read the introductory statement?

In 85, did he read the statement as he copied the 23 hectares from question 10?

Did he handle 85c correctly? That is, did he correctly omit the 2/10 hectare? Did he originally enter 2/10 but later discover his error since the plants were not lost?

9. Section VII, Irrigation and fertilization

Data for:

87--No

88--Yes

88a--3 metric tons

10. Section VIII, Livestock and poultry

Data for:

89--No

90--Yes; 2

91--No

92--Yes; 2

(1)--1

(2)--None

(3)--None

(4)--None

(5)--1

93--No

94--Yes; 1

(1)--None

(2)--1

95--No

96--No

97--Yes; 1

98--Yes; 1

99--No

100--No

101--No

102--No (Answer NO since mules are not mentioned by name to see if the enumerator will be alert enough to remember that you just reported having two mules. If the enumerator asks you about the mules, report that both of them were used for draft purposes.)

103--Yes; 100

(1)--None

(2)--100

104--No

105--No

106--No

107--No

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS--Continued

What to look for and comment on:

Did the enumerator read the introductory statement to Section VIII?

Did the enumerator follow correct procedures in each group of questions in Section VIII; that is, did he ask for the total then ask the number by age and sex?

Did the enumerator get the mules in 102?

11. Section IX, Sale of agricultural products

Data for:

108--\$100 to \$999

108a(1)--Yes

(2)--Skip

(3)--Skip

108b--Skip

What to look for and comment on:

Did the enumerator carefully read the introductory statement, particularly the items comprising agricultural products?

Did he skip to Section X after getting YES in 108a(1)?

12. Section X, Agricultural power, equipment, and transport facilities

Data for:

109a--Yes

109b--No

110a--Yes

110b--Yes

111(1)--Yes

(2)--No (Assume that the sesame land was plowed by a custom worker using his own tractor-operated plow. Assume that Mr. Rafael does not own one. Note that the enumerator may lead you to change your answer later.)

(3)--No

Interpret question 111 as referring to ownership rather than use to see if the enumerator will make any further inquiries, since you have just answered YES in 110b. A YES answer in 110b does not necessarily rule out all NO answers in 111; but such a combination is unlikely, and an alert enumerator should inquire further.

111(1)--Yes

(2)--Yes (after answering NO originally)

(3) to (9)--No

112(1)--1 jeep

(2)--None

What to look for and comment on:

Did the enumerator read 110b carefully?

Did the enumerator take sufficient time to read the list of items in 111?

13. Section XI, Characteristics of holder's household

Data for:

113--Ahmad Rafael; holder M; 28

Maria Rafael; wife; F; 28

Mossallam Rafael; father; M; 53

Tasa Rafael; son; M; 5

Sake Rafael; daughter; F; 2

114--None

What to look for and comment on:

After you gave the enumerator the above information, did he ask "Is there anyone else living with you?" or something to that effect to make sure you had reported everyone?

Did he list household members in proper order, with the father listed last?

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS--Continued

14. Section XII, Hired workers

Data for:

115--First answer NO to see if enumerator remembers you hired someone to plow the sesame land; then answer YES.

115a--Less than half

115b--\$50 (\$25 to \$99 category)

15. Section XIII, Source of income

Data for:

116--Income came largely from the sale of agricultural products (sesame)

116a--Yes (Wife and father make and sell jewelry.)

What to look for and comment on:

Did the enumerator read the introductory statement completely?

Did he correctly explain "family" and "gross" income?

16. Section XIV, Enumerator's record

Have each trainee complete this section. Check that it was filled properly, with the date of interview and the enumerator's name.

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

MOCK INTERVIEW--TORNA HOLDING

Outline	Narrative
Introduction	<p>Now that we have completed our study of the entire questionnaire, we will have a mock interview. This time we will go through the entire questionnaire at once. As before, each of you should fill a blank questionnaire just as if you were the enumerator. I will again act as the respondent and as I call on you, you will take turns acting as the enumerator continuing from where the previous person left off. We shall stop frequently to make some comments on the interview. At such times, if you have any questions, please ask them. If you wait until the end of the interview, you may forget to ask the question at all. Please find a blank questionnaire in your supplies now and mark TRAINING in large letters in the top margin.</p>

Identification items

Question: What is the first thing we should do?

Answer: Complete the identification items.

 Question: Where do you find the information for these items?

Answer: On the cover and on the listing page of the Listing Book.

Please copy this information which, as we said, would be taken from the Listing Book.

Write on the blackboard:

- A. Name of holder -- LAZLO TORNA
- B. Listing Book Page 1, Line 10
- C. Preliminary A-1 No. 3
- D. Rajpur Province, code 10
- E. Ranchi District, code 12
- F. PSU No. 04

According to the Listing Book entries, Mr. Torna and his son operate this holding in partnership. I am Mr. Torna's son, Abdullah Torna. When you interview, introduce yourself and ask the questions in order, as worded. Pay attention to the instructions and to the

Exhibit V-3-4. PORTION OF GUIDE FOR TRAINING ENUMERATORS -- Continued

Outline	Narrative
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skip pattern. Always read the introductory statements as you start a new series of questions.

Again, do not call on the trainees in a predictable pattern. Ask the trainee to share your copy of the script, reading the enumerator's part. In reply, you should read the respondent's part; but try to simulate a real situation by sometimes hesitating. Stop the interview where indicated to comment on the information.

The detailed script, key, and comments are reproduced in Appendix B of the Enumerator's Reference Manual, Form A-50. To keep the trainees alert, do not refer them to the script and key until after the interview is completed.

Exhibit V-3-5. PORTION OF ENUMERATOR'S WORKBOOK

(Applies to Province only; for the Northern Territory, the exercises would be adapted to the questions on the A-1b and A-1d)

FOREWORD

At various times during the training, you will be asked to complete an exercise in this workbook. Each exercise is related to the material covered just prior to assigning the exercise. Sometimes you will be asked to fill in blanks to complete a statement correctly; other times you will answer a question either by checking one of several given alternatives or by writing an answer in your own words; a third type of problem requires you to give the appropriate action to take in a hypothetical situation. If you do not know the answer, refer to the Enumerator's Reference Manual.

A fourth type is called self-study exercises. These are exercises for which the answers are given so that you can check yours immediately. For such exercises, you will find a paragraph of instructions followed by a sentence with one or two blanks in it. You are to fill each blank, using the information you learned in the preceding paragraph(s). If there is one blank, you will write a one-word answer; if there are two blanks, you will write two words. Sometimes there are a few long lines so you can write a longer answer in your own words. The correct answer is given in parentheses below the blanks that you are to fill. As you study these exercises, cover the answers before you begin a page. When you have answered a question, slide the cover down so that you can see the correct answer. If yours is correct go to the next one; if it is incorrect, reread the paragraph, then draw a line through your incorrect answer and write the correct one above it. The self-study exercises will always appear at the beginning of an assignment.

When all of you have completed the assignment, your trainer will go over it in class and give you the correct responses.

The purpose of these exercises is to reinforce the instruction that has been presented. The exercises are intended to be used as a learning device and will not be graded by your trainer. If they are to achieve this aim, you must do two things:

- (1) You must complete each exercise to the best of your ability.
- (2) You must take full advantage of this training technique by asking questions if you do not fully understand why the given answer (rather than yours) is correct. If you sit quietly because of a reluctance to admit that you do not understand a question, you have missed the point of the exercise and will not gain much from it.

Exhibit V-3-5. PORTION OF ENUMERATOR'S WORKBOOK--Continued

TRAINING EXERCISE NO. 3
(Section II of Form A-1a)

1. Holdings may consist of more than one tract of land. These tracts may border each other or they may be separated; some may even be outside the sample PSU.

Holdings may consist of _____ tract of land, and these tracts may be separated.

(MORE THAN ONE)

2. One type of ownerlike possession is the system under which a villager receives a plot of tribal or other communal land and retains it as long as he keeps it under cultivation by his own labor or that of his family, and under which he cannot sell or mortgage such land.

Under some systems, a villager who receives land rent-free retains it as long as he keeps it _____.

(UNDER CULTIVATION)

3. Land operated by squatters may be private or public property, and occupancy occurs without consent of the owner even though it may be tolerated by him.

A squatter occupies land without the _____ of the owner.

(CONSENT)

4. Tracts of land may be rented or leased with or without a written agreement. Sometimes land is rented for the crop season and, therefore, the date of expiration is not a definite one.

Because a tract of land may be rented for a crop season, the expiration date may not be _____.

(DEFINITE)

5. The A-1 Questionnaire is designed so that you can easily tell which questions you are to ask for a given situation. The general rule is: Always go to the next question unless you are specifically instructed otherwise.

If you have entered $3\frac{1}{10}$ hectares in question 6, the next question you should ask is question _____.

(6a)

6. Questions 5 through 10 are to be asked only if the holding is operated _____ or _____. Questions 11 through 14 are to be asked if the holding is operated _____ or _____.

7. Your respondent does not own any land. However, his wife owns 6 hectares which your respondent cultivates. The wife does not operate a holding herself. In which question would you report the 6 hectares?

Question _____

8. In question 6a, can you correctly check more than one box?

☐ Yes ☐ No

9. The entry in question 9 cannot be greater than the entry in --

- ☐ Question 6
☐ Question 5
☐ Question 10

10. Your respondent owns $4\frac{7}{10}$ hectares, rents 2 hectares from one of his neighbors, and allows another neighbor to use $1\frac{1}{10}$ hectares on a share-crop basis. What entry would you make for your respondent in question 10?

	$\frac{1}{10}$

11. Your respondent says he owns $23\frac{1}{2}$ hectares of land. He rents from a neighbor 4 hectares on which he grows rice; as rent, he pays \$50 a year and also half the rice crop. Of the land which your respondent owns, he allows his son to operate 8 hectares rent free; the son lives on the 8 hectares and uses his own equipment. Your respondent also uses 5 hectares of public grazing land which he shares with other households in the community. In the excerpt below, insert the correct responses for questions 5 through 10.

Exhibit V-3-5. PORTION OF ENUMERATOR'S WORKBOOK--Continued

	None	Area (Report fractions)
5. How much land do you own or hold in ownerlike possession?	<input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
6. How much land do you RENT FROM others for cash or share of the crop or livestock production?	None <input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
a. For the (amount in 6), what did you agree to pay as rent for the year? (Skip to 7)		
1 <input type="checkbox"/> Cash only → (Amount) \$ _____		
2 <input type="checkbox"/> Share of production only (Specify) _____		
3 <input type="checkbox"/> Cash and share of production → \$ _____ (Amount) and _____ (Share)		
<input type="checkbox"/> Other (Specify) _____		
7. How much land do you operate --	None	
a. On a squatter basis?	<input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
b. In exchange for services, upkeep of land, payment of taxes, etc.?	<input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
c. On some other basis? (Specify) _____	<input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
8. How much land --	None	
a. Do you RENT TO others for cash or share of the production?	<input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
b. Is OPERATED BY OTHERS on a squatter basis, in exchange for services, upkeep of land, etc.?	<input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
c. Is operated FOR YOU by a hired manager?	<input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
(If NONE in "a, b, and c," skip to 10)		
9. Of the (total amount in 8), how much do you own or hold in ownerlike possession? →	None <input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
10. Taking the (amount in 5) owned, adding the (amount in 6 plus the amount in 7) rented from others or operated rent free, then subtracting the (total amount in 8) rented to or otherwise operated by others, we get →		<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
The (amount in 10) is all the land in this holding even though part of it may be located elsewhere. The remaining questions refer to these (amount in 10). (Skip to 15)		

(Enter the answers directly on the excerpt of the questionnaire.)

12. The sum of the entries in 14a, b, c, and d must equal the entry in question _____.

13. Assume that the A-1a has the following entries:

Question 13	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">8 7/10</div>
Question 14a <input checked="" type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>
Question 14b <input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">5 5/10</div>
Question 14c <input type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">3 2/10</div>
Question 14d <input checked="" type="checkbox"/>	<div style="border: 1px solid black; width: 50px; height: 20px; display: flex; align-items: center; justify-content: center;">/10</div>

Are these entries consistent? ☐ Yes ☐ No

14. In question 15, why does the reference in parentheses refer to the amount in question 10 or 13?

15. It is very important that the entry in question 10 (or 13) be correct. Briefly tell why it is important.

16. How would you answer questions 16 and 16a if your respondent says his holding is one large tract except that a public road runs through the middle?

16. Is any parcel of this holding completely separated from the remainder by land or water which is not a part of this holding?

1 ☐ Yes x ☐ No (Skip to 17)

a. How many separate parcels are there in all? (Number) _____

17. Assume that you are enumerating in January 1972.

How would you answer question 17 if --

(a) Your respondent says he started to operate the holding when he moved here in February, which was almost a year ago?

Year	Month (If in 1971 or 1972)

(b) Your respondent says he has lived on this holding all his life (he is 30 years old) but he first operated the holding when his father died 8½ years ago?

Year	Month (If in 1971 or 1972)

Exhibit V-3-5. PORTION OF ENUMERATOR'S WORKBOOK--Continued

Key to Exercise No. 3

<u>Question</u>	<u>Answer</u>	<u>Question</u>	<u>Answer</u>				
1	More than one	12	Question 13				
2	Under cultivation	13	Yes				
3	Consent	14	Total area of holding would be given in question 10 if the holding is operated on own account or in partnership; it is entered in question 13 if the holding is operated by a hired manager or a chieftain.				
4	Definite	15	The remaining questions refer to the total area of the holding which is the amount in question 10 or 13.				
5	6a	16	Yes (public highway would separate the parcels)				
6	On own account In partnership As hired manager As chieftain	16a	2				
7	Question 5	17a	<table><tr><th>Year</th><th>Month (If in 1971 or 1972)</th></tr><tr><td>1971</td><td>FEBRUARY</td></tr></table>	Year	Month (If in 1971 or 1972)	1971	FEBRUARY
Year	Month (If in 1971 or 1972)						
1971	FEBRUARY						
8	No	17b	<table><tr><th>Year</th><th>Month (If in 1971 or 1972)</th></tr><tr><td>1963</td><td></td></tr></table>	Year	Month (If in 1971 or 1972)	1963	
Year	Month (If in 1971 or 1972)						
1963							
9	Question 5						
10	5 ³ / ₄ hectares						
11	See excerpt below.						

		None	Area (Report fractions)
5. How much land do you own or hold in ownerlike possession?		<input type="checkbox"/>	23 $\frac{5}{10}$
6. How much land do you RENT FROM others for cash or share of the crop or livestock production?		None <input type="checkbox"/>	4 $\frac{1}{10}$
a. For the (amount in 6), what did you agree to pay as rent for the year? (Skip to 7)			
1 <input type="checkbox"/> Cash only \rightarrow (Amount) \$ _____			
2 <input type="checkbox"/> Share of production only (Specify) _____			
3 <input checked="" type="checkbox"/> Cash and share of production \rightarrow \$ 50 (Amount) and Half the rice crop (Share)			
<input type="checkbox"/> Other (Specify) _____			
7. How much land do you operate -		None	
a. On a squatter basis?		<input checked="" type="checkbox"/>	$\frac{1}{10}$
b. In exchange for services, upkeep of land, payment of taxes, etc.?		<input checked="" type="checkbox"/>	$\frac{1}{10}$
c. On some other basis? (Specify) _____		<input checked="" type="checkbox"/>	$\frac{1}{10}$
8. How much land -		None	
a. Do you RENT TO others for cash or share of the production?		<input checked="" type="checkbox"/>	$\frac{1}{10}$
b. Is OPERATED BY OTHERS on a squatter basis, in exchange for services, upkeep of land, etc.?		<input type="checkbox"/>	8 $\frac{1}{10}$
c. Is operated FOR YOU by a hired manager? (If NONE in "a, b, and c," skip to 10)		<input checked="" type="checkbox"/>	$\frac{1}{10}$
9. Of the (total amount in 8), how much do you own or hold in ownerlike possession? \rightarrow		None <input type="checkbox"/>	8 $\frac{1}{10}$
10. Taking the (amount in 5) owned, adding the (amount in 6 plus the amount in 7) rented from others or operated rent free, then subtracting the (total amount in 8) rented to or otherwise operated by others, we get \rightarrow			19 $\frac{5}{10}$
The (amount in 10) is all the land in this holding even though part of it may be located elsewhere. The remaining questions refer to these (amount in 10). (Skip to 15)			

Note: The 5 hectares of public grazing land are not to be included in the questions on tenure.

Exhibit V-4-1. FIELD SUPERVISOR'S MANUAL (PROVINCES), FORM A-60

The Field Supervisor's Manual (Provinces) is reproduced
in Part B of Unit V. See Agrostan: A Case Study for the
1970 World Census of Agriculture, Unit V, Part B. Data-
Collection Procedures (Instruction Manuals), Series ISP-2,No. 1-g.

Exhibit V-4-2. FIELD SUPERVISOR'S MANUAL (NORTHERN TERRITORY), FORM A-61

The Field Supervisor's Manual (Northern Territory) is reproduced in Part B of Unit V. See Agrostan: A Case Study for the 1970 World Census of Agriculture, Unit V, Part B. Data-Collection Procedures (Instruction Manuals), Series ISP 2, No. 1-g.

Exhibit V-4-3. OUTLINE OF GUIDE FOR TRAINING SUPERVISORS

(Applies to Provinces only; for the Northern Territory, timing and content would be adjusted accordingly)

Day and period	Subject	Day and period	Subject
22 November, morning	<p>Foreword: Includes instructions to trainer on how to use the guide, preparation for training, training techniques, etc., and a detailed timetable by hours.</p> <p>STAGE 1. PRELIMINARY OPERATIONS</p> <p>1. Introduction and orientation to job</p> <ol style="list-style-type: none"> Opening remarks Objectives of 1971 Sample Census of Agriculture Significance of oath of office Administration of oath of office Completion of Application and Personnel Form for Temporary Field Service (Form A-200) Use of Identification Card (Form A-203) Conditions of employment <p>2. Overview of supervisor's job</p> <ol style="list-style-type: none"> Preliminary operations Supervision of enumeration <p>3. Preview of training program on preliminary operations</p> <ol style="list-style-type: none"> Review of enumerator's maps Spotting National Certainty holdings on map Subdividing designated large PSU's Recruitment and selection of enumerators <p>4. Basic materials needed for preliminary operations</p> <ol style="list-style-type: none"> District map showing sample of PSU's PCO copies of enumerator's maps Field Supervisor's Master Control of PSU's (Form A-100) National Certainty Listing (Form A-2c) Field Supervisor's Manual--Provinces (Form A-60) Field Supervisor's Record Book (Form A-103) Recruitment posters and other publicity materials Enumerator Selection Aid test (Form A-201) and Key (Form A-202) 	<p>22 November, afternoon</p>	<ol style="list-style-type: none"> Application and Personnel Form for Temporary Field Service Problem Referral (Form A-101) Pay Authorization (Form A-105) <p>5. Review of enumerator's maps</p> <ol style="list-style-type: none"> How to read and use maps How to locate PSU boundaries Noting items of information for enumerator's reference <p>6. Spotting National Certainty (NC) holdings on supervisor's map</p> <ol style="list-style-type: none"> Definition of NC holding Description of NC listing form and how it was prepared Canvassing the district to locate NC holdings Marking location of NC holdings on map Adding missed NC holdings to list <p>7. Subdividing designated large PSU's</p> <ol style="list-style-type: none"> Selection of boundaries for subdividing Drawing subdivision boundaries on enumerator's map (using PCO copy of enumerator's maps) <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Show trainee a previously prepared large sketch of a subdivided PSU, similar to exhibit II-3-4.</p> </div> <p>8. Recruitment procedures</p> <ol style="list-style-type: none"> Distribution of publicity materials (posters, leaflets, announcements to radio stations and newspapers).
		23 November, morning	

Note: Only those portions of the outline marked with an asterisk (*) are presented in exhibit V-4-4.

Exhibit V-4-3. OUTLINE OF GUIDE FOR TRAINING SUPERVISORS--Continued

Day and period	Subject	Day and period	Subject
	b. Contacting local officials for recommendations and assistance in finding enumerator applicants c. Arrangements with local officials for use of suitable testing and training space d. Posting announcements of date and place of testing 9. Testing and selection of enumerators a. Arranging furniture and equipment at testing site b. Administering and scoring the Enumerator Selection Aid test <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> Instructions to trainer: Have trainees take and score the test. </div> c. Review of Application and Personnel Form for Temporary Field Service d. Interviewing enumerator applicants e. Selection of best-qualified enumerators f. Notification of time and place for training 10. Recruitment records and reports a. Use of Supervisor's Record Book to record names of applicants and enumerators selected b. Report of recruitment progress to PCO by telephone (or telegraph) ----- 11. Preparatory activities relating to enumerator training a. Decisions on holding joint training sessions, combining several districts b. Assignment of responsibility for obtaining training space for joint sessions c. Specifications for training space and persons to contact d. Specifications for lodging facilities for enumerators and persons to contact 12. Administrative requirements relating to supervisors a. Use of Field Supervisor's Master Control of PSU's b. Record of days worked and kilometers traveled		c. Weekly preparation and transmittal of supervisor's Pay Authorization d. Pick-up and delivery schedule in each district e. Assistance in resolving problems 13. Closing remarks a. Time and place for second stage training b. Reports and materials to bring to next session STAGE 2. SUPERVISION OF ENUMERATION 14. Opening remarks 15. Review of supervisor's preliminary field operations a. General discussion and review <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> Instructions to trainer: Assign several exercises in Enumerator's Workbook (Provinces). In the meantime, review each supervisor's preliminary work as follows. (1) Inspect supervisor's district map for spotting NC holdings (2) Inspect National Certainty Listing for added NC holdings (3) Inspect subdivided PSU's (4) Select sample segment to be enumerated in subdivided PSU's; cross-hatch the non-sample portion (5) Review Supervisor's Record Book for entries regarding applicants and supervisor's work and travel record (6) Obtain report on training locations and number of enumerators still needed </div> b. Instructions for completing unfinished preliminary operations
23 November, afternoon		13 December morning	

Exhibit V-4-3. OUTLINE OF GUIDE FOR TRAINING SUPERVISORS--Continued

Day and period	Subject	Day and period	Subject
13 December, afternoon through 15 December	<p>16. Preview of training on supervision of enumeration</p> <p>a. Introduction to enumerator's job</p> <ol style="list-style-type: none"> (1) Canvassing the PSU and listing all holdings (2) Filling Agriculture Questionnaires (A-1's) for a subsample of holdings (3) Completing A-1's for assigned NC holdings (4) Reporting problems on Problem Referral forms <p>b. Introduction to supervisor's job</p> <ol style="list-style-type: none"> (1) Preparing assignments (2) Training enumerators (3) Periodically visiting enumerators to observe and review their work (4) Selecting subsample of holdings for A-1 questionnaires (5) Sending completed PSU's to PCO (6) Issuing pay authorizations to enumerators for satisfactory completion of listing and/or completing questionnaires (7) Recording appropriate information in Supervisor's Record Book (8) Reporting weekly progress 		<p>d. Selecting the subsample of holdings for the A-1 questionnaire</p> <p>e. Filling items (h) to (m) on front cover of Listing Book</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Give trainees previously prepared exercise on selection of subsample of holdings.</p> </div> <p>f. Assigning additional PSU's</p> <p>g. Assigning NC holdings</p> <ol style="list-style-type: none"> (1) Transcribe information for assigned NC holdings to blank National Certainty Listing (Form A-2c) (2) Provide enumerator with supply of NC questionnaires (Form A-1c) <p>h. Observing and reviewing A-1's</p> <ol style="list-style-type: none"> (1) Accompany enumerator and fill Observation and Review of Agriculture Questionnaires (Form A-122) (2) Review completed A-1's (3) Discuss the observation and review--both good points and weak points, assisting as necessary <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Give trainees previously prepared practice exercise in reviewing completed A-1's.</p> </div>
16 December, morning	<p>17. Enumerator training (training as it will be given to the enumerators except that it must be compressed into 2 1/2 days and the practice enumeration for 1/2 day will be delayed until the afternoon of 16 December.)</p> <p>18. Supervising enumerators in the field</p> <p>*a. Planning weekly schedule of visits to observe at least three or four enumerators a week and review their completed work</p> <p>*b. Observing and reviewing the listing</p> <ol style="list-style-type: none"> (1) Accompany the enumerator and fill Observation and Review of Listing (Form A-121) (2) Review entries in Listing Book (3) Discuss the observation and review--both good points and weak points, assisting as necessary <p>*c. Verifying the Summary of Page Totals on last page of Listing Book</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Give trainees previously prepared practice exercise on review of completed listings, using a filled Listing Book page with errors and inconsistencies.</p> </div>		<p>i. Complete lines (n) to (p) on front cover of Listing Book</p> <p>j. Resolving problems and assisting with non-responses</p> <p>k. Making appointments for next week</p>

Exhibit V-4-3. OUTLINE OF GUIDE FOR TRAINING SUPERVISORS--Continued

Day and period	Subject	Day and period	Subject
16 December, afternoon	<p>Instructions to trainer:</p> <ol style="list-style-type: none"> (1) Assign area for 1/2 day's practice enumeration that afternoon to each pair of trainees and provide needed materials. Set a time to visit each pair. (2) Assign 2 to 3 pages of the Guide for Training Enumerators to each trainee to study and present to the class the next afternoon as practice in using the Guide. 		<p>c. Assembling materials for initial assignment in enumerator's portfolio</p> <ol style="list-style-type: none"> (1) Envelope with enumerator's map and the Listing Book for the PSU (2) 35 blank A-1's per PSU (3) 6 Problem Referral forms (4) 6 pencils <p>22. Preparation for enumerator training</p> <ol style="list-style-type: none"> a. Mailing Notice to Report for Training (Form A-107) giving date, time, and place of training b. Preparing name cards and seating chart c. Completing Part B of Application and Personnel Form for Temporary Field Service <p>Instructions to trainer: Assist trainees to properly complete Part B of one enumerator's application and personnel form.</p>
17 December, morning	<p>19. Practice enumeration in the field (pairs of supervisor trainees will carry out both the enumerator's duties and the supervisor's functions of observation and review of each other's work; they will work together to select the subsample of holdings; each will fill A-1's for two cases. Collect and destroy completed forms used in this practice.)</p> <p>20. Discussion of field experiences from both enumerator's and supervisor's point of view</p> <p>21. Preparation of enumerator assignments</p> <ol style="list-style-type: none"> a. Setting up initial assignments of two PSU's for each enumerator b. Recording assignments in Supervisor's Record Book and on Field Supervisor's Master Control of PSU's <p>Instructions to trainer: Assist trainees to actually record assignments for two enumerators in the Supervisor's Record Book and on the Master Control of PSU's.</p>		<p>d. Selecting areas near training site for practice enumeration, preparing sketch maps and other materials</p> <p>Instructions to trainer: Show trainees how to select a suitable area, outside of sample PSU's; divide it into practice enumeration areas; and prepare sketch maps similar to yours.</p> <p>e. Arranging training room to best advantage</p> <p>Instructions to trainer: Assist supervisors training in teams to divide responsibilities for the preparations for training and for presenting the material in the training guide.</p>

Exhibit V-4-3. OUTLINE OF GUIDE FOR TRAINING SUPERVISORS--Continued

Day and period	Subject	Day and period	Subject
17 December, afternoon	<p>23. Practice training</p> <ul style="list-style-type: none"> *a. Importance of role as trainer *b. Training principles *c. Study and use of Training Guide <ul style="list-style-type: none"> (1) Importance of adhering closely to presentation and instructions in the Guide (2) Importance of adhering to time schedule (3) Techniques for using Training Guide *d. Practice presentations <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Ask each supervisor trainee to present the portion of the Training Guide that was assigned to him. Offer constructive criticism.</p> </div>		<p>25. Issuance of enumerator pay authorizations</p> <ul style="list-style-type: none"> a. When to issue the form <ul style="list-style-type: none"> (1) For completed listing of a PSU (2) For PSU's with A-1's completed (3) For completed National Certainty A-1's (4) For training fee and travel allowance b. How to prepare the form <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Instructions to trainer:</p> <p>Give trainees previously prepared practice exercise in filling an enumerator pay authorization.</p> </div> <ul style="list-style-type: none"> c. Keeping record of pay authorizations in Supervisor's Record Book
18 December, morning	<p>24. Supervisory responsibilities during enumerator training</p> <ul style="list-style-type: none"> a. Observing and advising each enumerator (or pair of enumerators) during practice enumeration in the field b. Making initial enumerator assignments c. Scheduling first visit to observe each enumerator during first 2 or 3 days of enumeration <ul style="list-style-type: none"> (1) Record date, time, and place of appointment in Supervisor's Record Book (and make sure enumerator also writes it on his portfolio label) (2) Schedule visits to weakest enumerators first d. Review and completion of personnel form for enumerators e. Transmittal of personnel forms and enumerator tests to PCO 		<p>26. Weekly progress reports</p> <ul style="list-style-type: none"> a. Fill Weekly Progress Report (Form A-104) b. Source of information for the report <p>27. Reporting accidents and injuries</p> <p>28. Transmittal to PCO</p> <ul style="list-style-type: none"> a. Filling the Field Transmittal (Form A-102) b. Materials to be transmitted <ul style="list-style-type: none"> (1) Completed PSU's (map, Listing Book, A-1's) (2) Supervisor's Pay Authorizations (3) Field Weekly Progress Reports (4) Problem Referrals (from self or enumerators) (5) Miscellaneous communications to PCO staff c. Method of sending--deposit at District Office of Ministry of Economy for scheduled weekly pick up by PCO truck d. Enclosure of Field Transmittal in each package

Exhibit V-4-3. OUTLINE OF GUIDE FOR TRAINING SUPERVISORS--Continued

Day and period	Subject	Day and period	Subject
	<p>29. Final transmittals to PCO at end of assignment</p> <p>a. Supervisor's materials</p> <ol style="list-style-type: none"> (1) Completed Field Supervisor's Master Control of PSU's (2) National Certainty Listing (3) Individual enumerator assignment of NC holdings (supervisor's copies) (4) Supervisor's district map (5) Field Supervisor's Record Book (6) Filled Observation and Review forms (7) Identification card (8) Blank forms (questionnaires, Listing Books, Problem Referrals, Field Weekly Progress Reports, Pay Authorizations, etc.) <p>b. Enumerator's portfolios</p> <ol style="list-style-type: none"> (1) Enumerator's district map (2) Identification card (3) National Certainty Listing Forms giving individual enumerator assignments (4) All blank forms 		<p>c. PSU envelopes containing enumerator's map, the Listing Book for the PSU, and completed A-1's</p> <p>30. Checklist of enumeration supplies</p> <ol style="list-style-type: none"> a. Contents of portfolios containing items in small quantities which supervisors will take with them (identification cards for enumerators, blank National Certainty Listing forms, observation and review forms, progress reporting forms, etc.) b. Bulk supplies to be picked up at District Office of Ministry of Economy (questionnaires for PSU's and NC holdings, PSU envelopes containing PSU maps and Listing Book, Enumerator's Reference Manuals, Enumerator's Workbooks, etc.) <p>31. Closing remarks</p>

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS

Outline	Narrative
18. Supervising enumerators in the field	Throughout the enumeration period your main responsibility will be to supervise your enumerators in the field, that is, while they are on the job, to see that they are producing work of satisfactory quality and quantity. This means visiting each enumerator as frequently as possible and spending some time with him, to observe him at work and to review his completed work.
a. Planning weekly schedule of visits to 3 or 4 enumerators	To make efficient use of your time, you must plan your visits systematically, so that you will visit each enumerator in turn at least four times during the enumeration if needed. Section IV of your Record Book has been designed to help you plan your visits systematically. Look at Section IV now on the back cover of your Record Book.

Pause

As you see, this is an overall time schedule covering each week in January and February. You will enter each enumerator's name on a line in the first column when you make appointments for your initial visits after training. Enter a check on the line under the date you plan to visit each enumerator; then enter a code for observation or review of work, whichever you expect to be the main purpose of the particular visit.

Question: What codes are indicated here for you to use, Mr. _____ ?
 Answer: "O" for observation and "R" for review.

Since your first visit to each enumerator during the first 2 or 3 days of enumeration is to observe, you will use the code "O" for the first visit. Try to see your weakest enumerators first as they will need the most help getting started correctly. After your first visit, you will generally know whether your visit will be primarily to observe or review work and you should enter the appropriate code. If appropriate, enter both codes.

Do not schedule more visits than you can handle within a week. For the most part, you will be able to visit only about three or four enumerators in a week if you allow yourself the necessary time with each. You will be traveling around a considerable part of your time and you must allow for travel time. Tentatively,

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
	<p>schedule your visits for a week or two in advance. This will help insure that you do not overlook any one of your enumerators. Then while you are actually with an enumerator during the current week, consult your advance schedule for the next date you plan to visit him. At this time make a definite appointment with him and record the date, time, and place of your appointment in Section II of your Record Book. Also, see that the enumerator records the same information on his portfolio label so that there will be no misunderstanding.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> <p>Illustrate on the blackboard how to schedule visits with 5 enumerators during the first 2 weeks of January.</p> </div>
(1) Adjust when necessary	<p>Don't be inflexible about your schedule, however. If you find that you need to spend an extra half-day with an enumerator while you are there, do so. If necessary, reschedule your following appointment as best you can.</p>
(2) Be prompt	<p>It is important that you, as well as the enumerators, be prompt in fulfilling your appointments, and you should put forth extra effort to meet your schedule. However, an emergency may arise and you may be delayed. You should have an understanding with all your enumerators not to wait more than 45 minutes for you to keep an appointment. If you haven't arrived by then, the enumerator should continue working and you should get in touch with him as soon as possible to schedule another appointment to make up for the missed one.</p>
(3) Keep record	<p>Section IV of your Record Book will show you your overall schedule of visits for an entire week. Section II will give you the specific date, time, and place of each visit. Also, remember that I will be visiting you periodically to review your progress; but I will inform you as far in advance of my visit as possible, so that it won't upset your schedule.</p> <p>Are there any questions about using Section IV to schedule your visits to enumerators in advance?</p>

Answer any questions.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
<p>b. Observing and reviewing the listing</p>	<p>Listing a PSU is the first task of an enumerator. He will canvass the PSU systematically and completely, and list every housing unit he finds within the PSU boundaries. He will also obtain certain information so that he can list each holding in the PSU.</p> <p>Your responsibility as his supervisor is to observe him actually listing, and also to review his completed listings. You must determine if he is following the listing procedures correctly, and if not, help him correct his errors and possibly give him additional training. Remember that you are to start each enumerator out with an assignment of two PSU's. You will not assign additional PSU's or NC holdings to be enumerated until you are sure an enumerator is able to perform satisfactorily.</p>
<p>(1) Accompany the enumerator and fill Observation and Review of Listing (Form A-121)</p>	<p>On your very first visit and again on one or two of your later visits, accompany the enumerator while he is canvassing and listing his PSU, and observe everything he does. Do this as quietly as possible. Instruct your enumerators to introduce you as their supervisor, but remain in the background. Don't interrupt the enumerator while he is asking questions. Discuss what he has done <u>after</u> you leave the household--<u>not</u> in front of the respondent.</p> <p>You are to record your observation of listing and review of completed listings on this form called "Observation and Review of Listing (Form A-121) which I am giving you now.</p>

Distribute Form A-121
to trainees.

You will prepare one of these forms for each enumerator. Take it with you on each visit and make entries on it to summarize your observation and review.

Items A through D of the heading are identification items which you will fill in advance. During your visit, enter in item F the number of the PSU to which your observation and review apply. In item G, enter the total number of listing lines you observed being filled and the total number of completed listing lines you reviewed on each visit. Enter the date of each visit in item H.

Items 1 to 13 are specific questions you must answer to summarize all your observations and review of listing on each visit.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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Question: For how many visits can you summarize observation and review of work on this form, Mr. _____?

Answer: 5.

Notice that in the "O" column, you can circle "Y" for yes or "N" for no in answer to all 13 questions. All of these questions are not applicable, however, when you summarize your appraisal of work reviewed in the "R" column.

Question: Which questions apply to review of work, Mr. _____?

Answer: Items 5, 8, 9, 10, 11, and 12.

The remaining questions which have been shaded in the "R" column are those which can only be answered when you are actually present observing the enumerator's performance.

Are there any questions about how to use this form?

Answer any questions.

I want to emphasize that on this form you summarize your impressions of all the listing you observed or your appraisal of all the work you reviewed during a particular visit. You are not to record your observations of each line filled or appraisal of each line reviewed. For example, you may have observed six listing lines being filled and in five of those cases the enumerator showed his identification card but forgot to show it in one instance.

Question: How would you answer item 3 in that case, Mr. _____?

Answer: Circle the "Y" because he followed the correct procedure most of the time.

(2) Review entries
in Listing Book

Suppose in reviewing three completed pages in the Listing Book, you found that an entry for column 5 had been omitted twice on the three pages.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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Question: How would you mark item 8 to summarize the enumerator's performance on this item, Mr. _____?

Answer: Circle "Y" since he marked both items in most of the cases.

- (a) Call attention to errors

Don't forget to caution an enumerator, however, about any errors you detect, even if few in number.

When an enumerator continues doing something incorrectly, even though you call his attention to the error a number of times, then you would have to circle "N" for the rating. Always explain your "N" answers in the "Notes" space.

At the end of each visit, enter a brief overall evaluation of the enumerator's performance in the space provided at the bottom of the form. For example, you might write something like this, "Understands the listing procedures very well but forgets to enter directional arrows on map and does not adequately describe the location of the housing unit in column 3." Note the date of the visit to which your comments relate. Before you see the enumerator the next time, review your notes so that you will be sure to check on the particular deficiencies previously noted.

- (b) Follow the questions on A-121

To review completed Listing Book entries, you must check the columns specifically mentioned in items 8 to 12 of the observation and review form, and also check the enumerator's map. First, as directed in item 5, check to see that directional arrows have been drawn on the map to indicate direction of travel through the PSU. This will help you determine how completely the enumerator is canvassing his area and if he is doing it systematically.

Question: What is meant by canvassing systematically, Mr. _____?

Answer: It means following a planned and systematic order of covering all roads, paths, and trails within the PSU boundaries.

Next, item 8 of your observation form tells you to check to see if both columns 4 and 5 of the Listing Book have been answered. Look at those columns now, and see if you have any questions.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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Answer any questions

Item 9 on Form A-121 directs you to check whether the instructions in column 6 have been correctly followed. Read the column 6 instructions to yourself.

Pause

Question: What would you look for in column 6,
Mr. _____?

Answer: To see that only one name was listed on
each line, except in the case of partners.

This means that in checking column 6, you will also have to check column 7 whenever there is more than one name entered on a line to be certain that a partnership is indicated.

(c) Check
sublines

Item 10 of your observation and review form requires you to check the sublines in columns 7 to 15 to see that they are used correctly. Column 7 is again your guide. For each box checked in column 7, a corresponding subline must be filled in columns 8 to 15.

(d) Other
checks

Item 11 of the observation and review form tells you to check columns 8 to 12 to see if the correct entry has been made. Read for yourself the instructions in your Listing Book above columns 8 to 12.

Pause

Question: What type of entries will you look for in
these columns, Mr. _____?

Answer: An "X" in column 8 or a number entry in
columns 9 to 12.

Item 12 of the observation and review form instructs you to check column 16 to see that the respondent has been identified. This must be done for each filled line.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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Are there any questions on these items of the observation and review form which apply to review of completed work?

Answer any questions.

You should also make several other checks on the Listing Book. For example, you should check column 2 for entry of road name or number and column 3 for location or description of the housing unit. There must be adequate entries in these columns. Another important consistency check is to make sure that column 4 is always marked "Yes" if there is a number entry in column 14 and column 5 is "Yes" if there is a number entry in column 15.

The enumerator should have entered a large "X" in the left part of column 22 for a completed listing line, even for vacant units. Callback information should be entered in column 22 for an incomplete line.

(e) Totals

The last check you should make on each completed page is to verify the enumerator's "total" entries in columns 7 to 12. And remember, the total is the total number of entries in each column, not the number of hectares.

Question: First you check the addition of entries in each column, then check the totals. What is the quickest way to verify these totals, Mr. _____?

Answer: The total in column 7 must equal the sum of the total entries in columns 8 to 12 on each page.

(f) Shaded columns

As you review completed listings you will make some entries on each page in certain shaded columns designated "For Supervisor's Use." Find these columns now on a listing page.

Pause

Question: Which columns are for your use, Mr. _____?

Answer: 17, 18, 19, and 21.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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For each listing which you approve, enter the date in column 17 of the Listing Book. When you approve a number of consecutive lines which need no correction or additional information, you may enter the date for the first and last such listings and connect with a vertical line.

Illustrate on the blackboard how to use column 17.

When corrections are necessary, note instructions in column 22 and leave column 17 blank until you are able to approve the line.

Column 18 concerns National Certainty holdings, and columns 19 and 21 concern the subsample of holdings for which A-1's are filled. We shall discuss these three columns a little later, when we take up the matter of selecting the sample of holdings for purposes of filling A-1's.

- (3) Discuss the observation and review--both good and weak points, assisting as necessary

Both good and weak points should be discussed with the enumerator. After you have observed the listing of a holding and have left the household, first tell the enumerator what he did well. Every enumerator needs a little encouragement. Then point out the things he needs to improve. He may simply need to be reminded of some oversights. If he shows lack of understanding of some phase of listing, however, then you will have to take the time to give him additional training. For example, he may not understand how to convert various land measures to hectares. Be sure to follow up any additional training you give with additional observations to make certain the enumerator now understands the procedure. If you decide that you can't train an enumerator to perform satisfactorily, you will probably have to discharge him and reassign his work either to a new enumerator or to one of your other enumerators. Be sure to report any such situation to me.

When you review completed work, note all errors, omissions, or discrepancies in column 22 of the Listing Book. Point them out to the enumerator as you go, but also try to find some good points on which you can commend him. Have him make corrections to the extent that he can while you are with him. Where callbacks are necessary to correct errors, omissions, etc., keep a record of such instructions on your observation and review form (A-121) so that you can check on your next visit to see that your instructions were carried out.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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Don't hesitate to call to the enumerator's attention small details which need improvement. That may be the only way you can make him aware that he must be careful about details.

Being critical is not an easy job, but it is one of your chief responsibilities. It must always be done in a constructive and considerate manner, however. When it is necessary to criticize, you must be prepared to assist the enumerator to improve his performance. Do you have any questions about this phase of your work?

Answer any questions.

c. Verifying the Summary of Page Totals

As you review each completed listing page and verify the totals for columns 7 to 12, also check the enumerator's entries of page totals in the corresponding columns of the "Summary of Page Totals" on the last page of the Listing Book. Look at this summary now.

Pause

Notice the heavy line dividing the summary. The enumerator will use the left side and you will verify his entries. You will make the entries on the right side, as we shall discuss when we learn about sample selection.

If you find any discrepancies when you re-add the columns on each listing page, be sure that you make corresponding corrections for that page in the summary.

Question: After you check the transcription of page totals to the summary, how can you verify them, Mr. _____?

Answer: Verify that column 7 is equal to the sum of columns 8 to 12 on each line of the summary.

When you are reviewing a completed listing for a PSU, also verify the enumerator's entries of PSU totals on the last line on the left side of the page summary. Are there any questions?

Answer any questions.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
Practice exercise in review of listing	Now we are going to have some practice in reviewing a completed listing page. I am giving each of you a copy of a filled listing page which contains some errors and inconsistencies. You are to review each line and circle all errors, omissions, and inconsistencies that you find. Enter today's date in column 17 for each line you approve and make notes in column 22 for each line which needs correction or additional information. Use your observation and review form (A-121) as a guide, but check each line completely. When you finish, we shall discuss the errors and inconsistencies.

Give each trainee a copy of the previously prepared practice exercise on review of listing, as reproduced on the following page. Allow about 10 minutes for the trainees to review the page, then go over the exercise by asking about each line. Use the information given below to discuss the errors, omissions, and inconsistencies.

<u>Line</u>	<u>Comment</u>
1	Column 6--Name of holder omitted
2	Columns 8 to 15--Entries omitted for holding operated as hired manager or chieftain
3	Columns 4 and 14--Entries inconsistent
4	Column 9 (or column 10)--Entry in incorrect column
5	Line approved--Should have date in column 17
6	Line approved--Should have date in column 17
7	Column 14--Entry on wrong subline
8	Line approved--Should have date in column 17
9	Columns 6 to 15--Entries omitted Column 22--Incorrectly marked as completed line
10	Columns 5 and 15--Entries inconsistent
Total line	Entries incorrect because of line errors

Point out that it is not always possible to pinpoint the precise error; for example, on line 9, the error may be due to the entry in column 5, rather than that entries are omitted for columns 6 to 15. The note in column 22 should reflect the probable inconsistency.

Are there any questions now about review of listing, before we go on to sample selection procedures?

Answer any questions.

PRACTICE EXERCISE ON REVIEW OF LISTING
(Circles indicate errors, omissions, and inconsistencies)

[illegible]

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
23. Practice training	For this part of your training we are going to be concerned with how you train enumerators; one of your most important supervisory duties is the training of your enumerators. When you train, you will use the same Guide for Training Enumerators that I used in training you--the one which I gave you to study yesterday. A little later, each of you will have the opportunity to do some practice training, using the guide.
a. Importance of role as trainer	I can't stress too much the importance of your role as trainer. Census work is highly specialized work for which the necessary knowledge and skills must be taught quickly and effectively. Successful enumeration in your district will depend in a large measure on a successful training session. The success of your training session will depend on how thoroughly you prepare yourself for training and how effectively you use the training materials.
b. Training principles	As you probably know, there are certain basic training principles which pertain to all types of training. Some of these are particularly applicable to your training of enumerators where you will be using a verbatim training guide.

As you begin discussing each principle, write a brief version of it on the blackboard. For the first principle, write:

1. Prepare yourself.

- (1) Prepare yourself

The first principle is to prepare yourself by knowing your material thoroughly. Go over the main concepts and procedures until you understand them fully. Study your Training Guide and practice using it, so that you are completely familiar with it. Trainees can sense it very quickly when an instructor is not well prepared.

Write:

2. Plan your presentation.

- (2) Plan your presentation

Second, plan your own presentation by marking key points in your Guide for emphasis and repetition. Also jot down special explanations or illustrations from your own experience which will help to clarify certain points.

Write:

3. Present topics in logical order.

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
(3) Present topics in logical order	Third, present topics in logical order by following the exact order of presentation in the prepared Guide. The order of topics in your Guide has been carefully planned. Just follow it.

Write:

4. Trainee participation.

- (4) Trainee participation

Fourth, make full use of trainee participation through the various ways provided in the Guide. These include asking questions, doing practice exercises and mock interviews, having trainees read, and so on. Having trainees participate will help hold their interest and keep them alert. A word of caution about calling on trainees though--call on the timid trainees as well as the eager ones who are always volunteering.

Write:

5. Vary the presentation.

- (5) Vary the presentation

Make full use of any devices which are called for in the Guide to vary the presentation. These include use of the blackboard for emphasis or sketching, use of illustrations or blow-ups of forms, and use of any other visual or audio-visual training materials provided, such as film strips, recordings, and movies.

Write:

6. Create interest.

- (6) Create interest

Next, create interest by your own example. You and your own attitude are major factors in creating interest and arousing enthusiasm on the part of your trainees. Only by showing interest in the subject yourself will you be able to stimulate the interest of your trainees. Also, by always being cheerful, friendly, and confident in your role as trainer, you will establish rapport with your class and be more effective in accomplishing your training objectives.

Above all, be honest in your answers to trainees. They can quickly tell when you are guessing. If you don't know an answer, be frank and admit it. Then suggest that all of you look up the answer together. If the answer can't be found in the manual, then promise to get the answer and be sure to keep your promise. After all, you

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
	<p>are a new employee too, and it is understandable that you would not be prepared to answer every question that could be raised. It is important, however, that you follow through on any promises.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>Write:</p> <p>7. Have trainees do what they are taught.</p> </div>
(7) Have trainees do what they are taught	<p>Finally, it is essential that trainees be given the opportunity to <u>do</u> what they are taught as soon as they are ready. Therefore, as soon as your enumerators have learned the questionnaire and the enumeration procedures, they must have practice in using the questionnaire. This is provided through mock interviews in the classroom and practice enumeration in the field. This practice cannot be omitted. You are responsible for seeing that the trainees get this very necessary practice.</p> <p>Are there any questions about these training principles?</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>Answer any questions.</p> </div>
c. Study and use of Training Guide	<p>Even though this may be your first experience at training, you should not be timid about it. The verbatim Guide for Training Enumerators, as you have probably observed, contains complete and explicit instructions for every step of the training. The material has been carefully planned so that every subject is given the proper amount of attention, and the important points are emphasized.</p> <p>If you are thoroughly prepared and follow the instructions faithfully, you should achieve the desired results. You should have a smooth and effective training session. Now I want to discuss some of the features of your training guide.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>Ask trainees to turn to the foreword in the front of the Guide.</p> </div>
(1) Importance of adhering closely to presentation and instructions in the Guide	<p>It is most important to study this foreword carefully. Here you will find all necessary instructions on how to use the guide. For example, it explains that the guide has a two-column format with the main points of the training content given in the "Outline" column on the left and the verbatim text that you must follow given in the "Narrative" column on the right. Turn to page 1 of the guide and note the two columns.</p>

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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Pause

Now look at the foreword again. You will see that instructions you are to carry out are enclosed in a six-sided box; of course, you will not read these aloud. These instructions might direct you to use the blackboard, to conduct a mock interview or have the trainees do a workbook exercise, and so on. Questions you are to ask and the expected answers are enclosed in rectangular boxes. You will need to become familiar with these symbols and follow all instructions in presenting the training. Glance through a few pages in the guide now and look for some of these symbols.

Pause

The foreword also contains reminders of specific preparations which should be carried out in advance of training, such as preparation of name cards and a seating chart for your use. Be sure you check yourself on all of these.

(2) Importance of
adhering to
time schedule

Now look at the daily timetable by hours given at the end of the foreword.

Pause

You should adhere to this daily timetable as closely as possible. It gives time allowances for each training topic; the allowances are based on tests and are believed to be adequate. In order to cover every topic adequately, it is important that you control discussions so that they won't cause deviations from the schedule. If a question relates to something that will be covered later, ask the trainee to hold his question until you get to that subject. Once you get behind schedule it is very difficult to catch up. You may find that your time has run out and you haven't covered some of the important parts. Or you may find yourself ahead of schedule and will not have thoroughly covered some aspects.

I suggest, as a reminder to yourself, that you write the beginning time for each subject listed in the timetable, on the page where that subject starts.

Question: According to the timetable, what time will you note on the page where the training on the A-1 starts, Mr. _____?

Answer: 1:00 p.m. (on 27 December)

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
(3) Techniques for using Training Guide	<p>The foreword also points out various techniques for using the guide effectively. For example, the blank line at the end of a question is used to remind you to call on a trainee by name <u>after</u> you have asked the question, not before. This technique keeps all of them alert. If you start with a trainee's name, then ask a question, the others may feel relaxed and not give close attention.</p> <p>Another suggested technique is to read the prepared text clearly, with as much expression as possible, and to look up at the class frequently. In fact, it should appear as if you are talking rather than reading. Don't mumble, don't read too fast or in a monotone, and don't keep your eyes on the text constantly. Practice this technique before you actually train. Also, by standing rather than sitting to make your presentation, you will have better control of the class and more freedom to move around. You should elevate your guide so that it is a comfortable height for reading in a standing position.</p> <p>If you have an instruction to use the blackboard, write large enough and clearly, so that it can easily be seen by all trainees. You should know ahead of time when the use of the blackboard is required. A suggested technique to save training time, is to put illustrations on your blackboard in advance--during lunch time, or at a break, or when trainees are doing workbook exercises. There are other helpful techniques mentioned in this part of the foreword. You should study and apply all of them when you are training.</p>
d. Practice presentations	<p>We are about to begin the practice training presentations for which you studied last night. When you take your turn at being the trainer, you are to carry out all instructions contained in your assigned portion of the Guide. The rest of the group will act as trainees and will answer questions or follow whatever instructions you give them. At the same time, we shall also be observing how you use the Guide and how you apply the training principles and techniques we have discussed. The main purpose of these training presentations is to try to help each of you with constructive criticism which will improve your training techniques. Constructive criticism includes pointing out good points as well as weak points that need improvement. Calling attention to good points may help someone else. I will ask each of you to comment on your own presentation first, then I will ask for comments from the class. After that, I will offer any additional helpful suggestions that I can. Let's begin now with Mr. _____ as trainer.</p>

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
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Call on trainees in the order in which you made the assignments yesterday:

<u>Name</u>	<u>Page</u>	<u>Paragraphs</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

As each trainee makes his presentation, follow along in your copy of the Training Guide. Also, fill the "Practice-Training Rating Sheet" which appears on the following page.

Sit with trainees, preferably in the back of the room, during the presentations.

Allow from 5 to 10 minutes per trainee for the presentation and critique.

(1) Comments from trainee

Thank you very much, Mr. _____. Will you please remain there for a few minutes. Would you like to comment on your own presentation first?

Allow time for the practice trainer to make some comments.

(2) Comments from other trainees

Does anyone have a special comment to make that will be helpful to either Mr. _____ or to the rest of the group?
(name of "trainer")

After comments from the group, offer any helpful suggestions of your own that have not yet been covered, using your rating sheet. Try to commend each trainee on some good points. Then call on next trainee to make his presentation.

(3) Your comments and suggestions

Now you have all had a chance to present part of the training and to observe and comment on the presentations of others. At this point you should know something about your own strengths and weaknesses and which techniques you need to concentrate on and practice

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

PRACTICE-TRAINING RATING SHEET -		Name of trainee													
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Did the trainee--															
1. Read clearly and loudly enough?															
2. Read at a pleasing rate of speed (neither too slowly nor too rapidly for easy understanding)?															
3. Have ready and close at hand all materials needed for his presentation?															
4. Hold the attention of the class by looking up frequently?															
5. Read the verbatim materials as printed?															
6. Follow instructions to him as printed in the guide?															
7. Handle exhibit materials effectively and as instructed?															
8. Use the blackboard effectively and as instructed?															
9. Allow enough time for majority of class to follow his instructions for locating materials, making entries on forms, etc.?															
10. Handle questions from class properly (refer trainees to instructions in the Reference Manual, ask trainees to hold questions that would be answered later, or answer questions properly from his own knowledge)?															
Instructions: Answer each question for each trainee by marking an X in the YES or NO column; if the question does not apply, leave it blank. Use the reverse side for additional comments or explanations of your rating.															

Exhibit V-4-4. PORTION OF GUIDE FOR TRAINING SUPERVISORS--Continued

Outline	Narrative
	<p>most before you train your enumerators. The more you practice and the more familiar you become with the Training Guide, the easier the training will become.</p> <p>Do you have any questions about the use of the Training Guide before we go on?</p>

Answer any questions.

Call on each trainee, in turn, and follow the same procedure for the critique.

Exhibit V-5-1. MANUAL FOR THE PROVINCE OFFICE, FORM A-70

The Manual for the Province Office is reproduced in Part B of Unit V. See Agrostan: A Case Study for the 1970 World Census of Agriculture, Unit V, Part B. Data-Collection Procedures (Instruction Manuals), Series ISP 2, No. 1-g.

Exhibit V-5-2. MANUAL FOR THE TERRITORIAL OFFICE, FORM A-71

The Manual for the Territorial Office is reproduced in Part B of Unit V. See Agrostan: A Case Study for the 1970 World Census of Agriculture, Unit V, Part B. Data-Collection Procedures (Instruction Manuals), Series ISP 2, No. 1-g.

OTHER EXHIBITS FOR REFERENCE

(Exhibits from other units of the case study that are referred to in Unit V appear
on the following pages)



(Applies to Provinces only; timing for the Northern Territory would be adjusted accordingly)

[illegible]

Exhibit II-3-4. EXAMPLE OF A SUBDIVIDED SAMPLE PSU

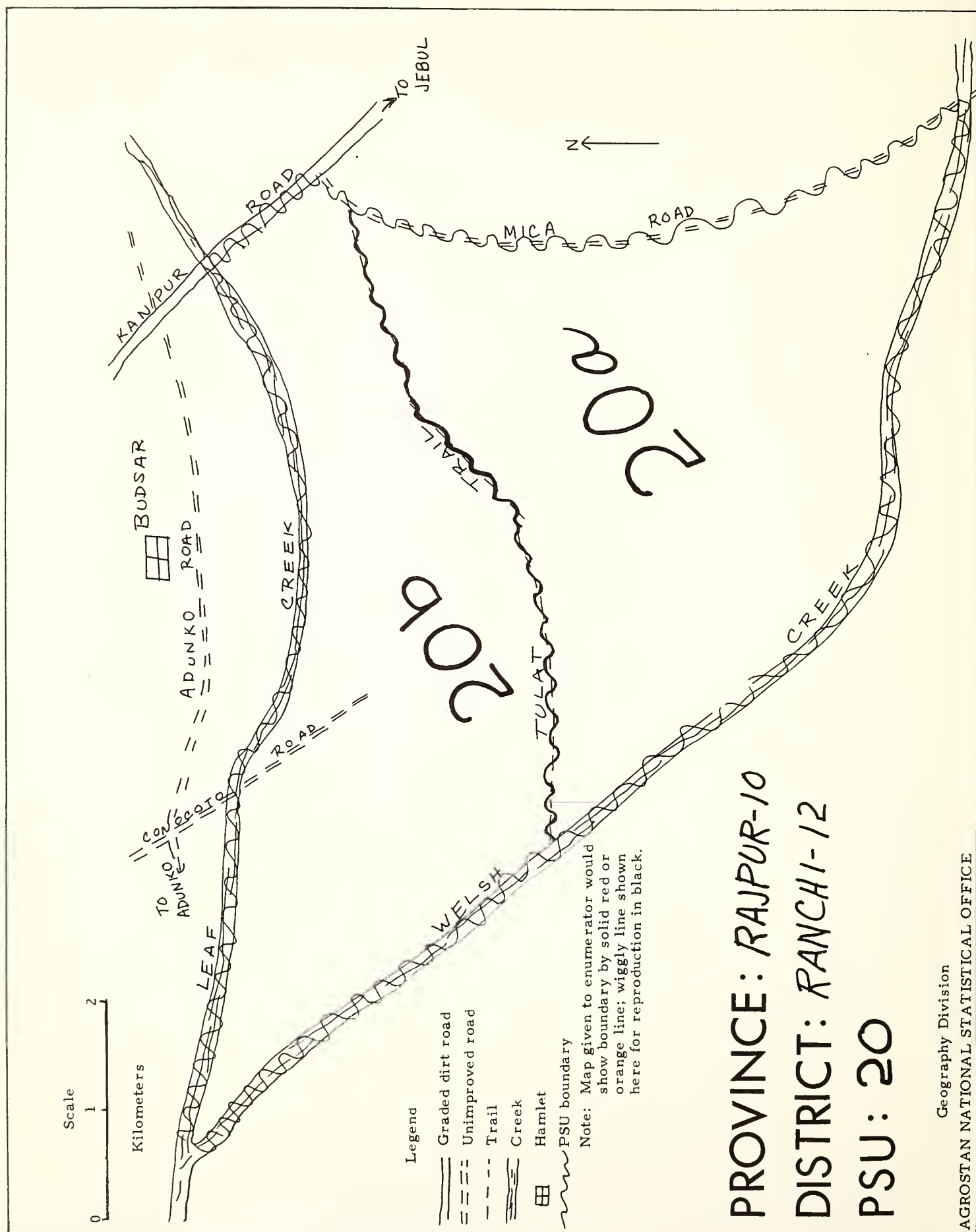


Exhibit II-3-5. ENUMERATOR'S MAP FOR A SAMPLE PSU

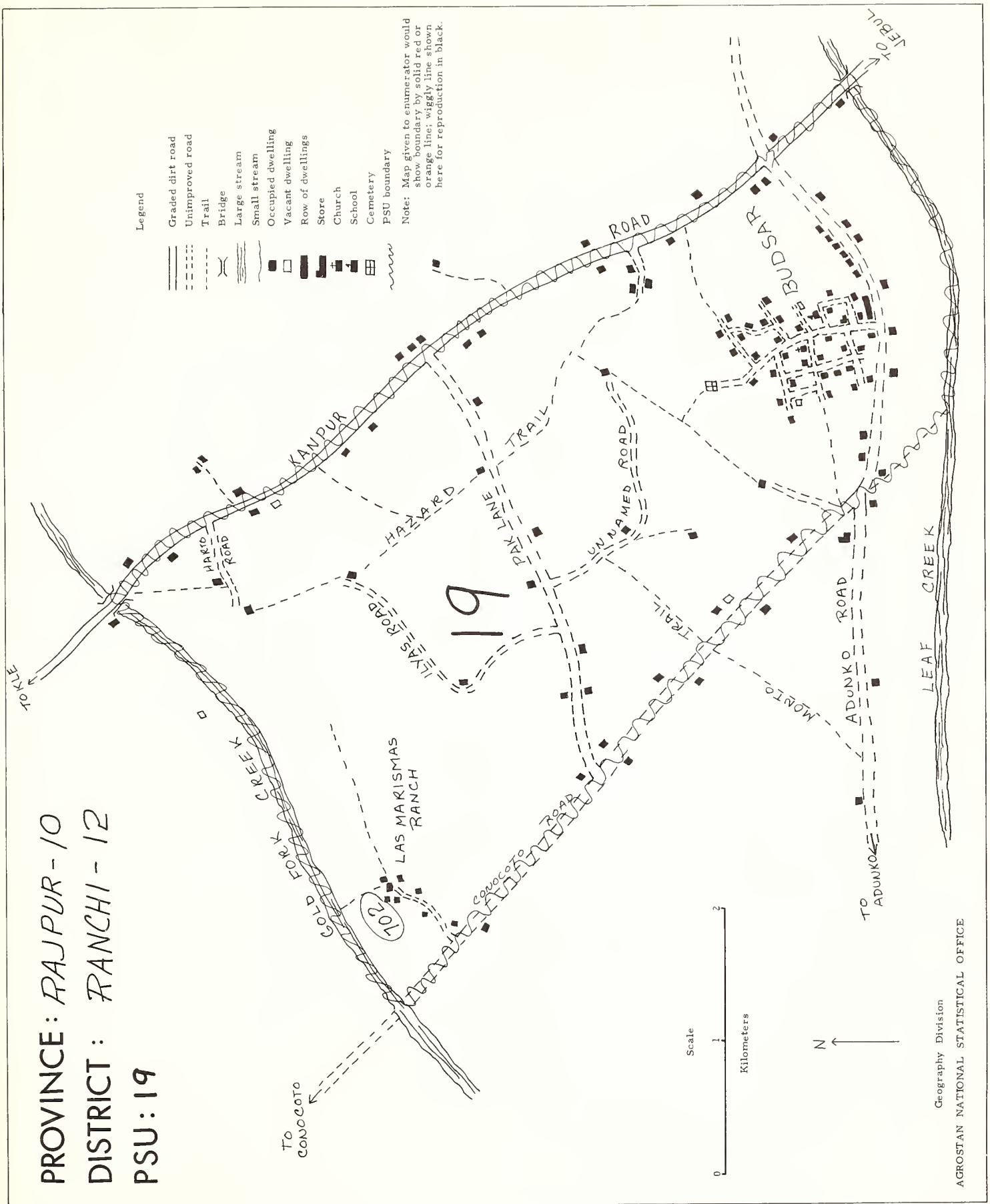


Exhibit II-3-6. DISTRICT MAP SHOWING SAMPLE PSU'S AND LOCATION OF NATIONAL CERTAINTY HOLDINGS

(PSU's that were subdivided are those with cross-hatching on the portion not to be enumerated)

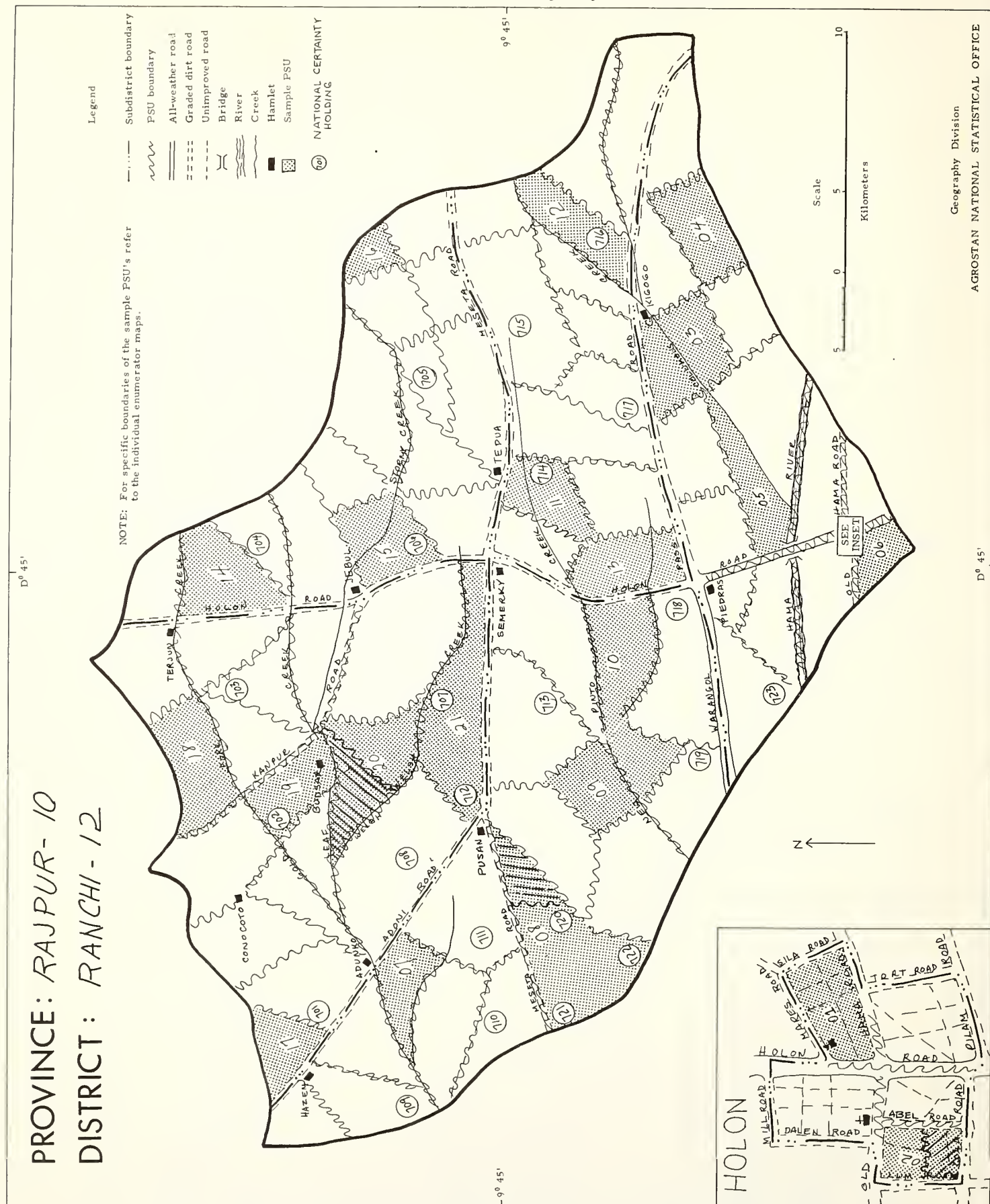


Exhibit III-2-1. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES), FORM A-1a

CONFIDENTIAL - This inquiry is required by law. All information will be held strictly confidential.		IDENTIFICATION			
Form A-1a (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE		A. Name of holder	B. Listing Book (A-2a) - Page _____, Line _____
1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (Provinces)		D. Name of province		E. Name of district	F. PSU No.
		Code	Code	G. Final A-1a No.	H. Sampling weight
Section II - TENURE OF HOLDING					
Section I - GENERAL INFORMATION		Section II - TENURE OF HOLDING			
1. Unit of area and method of operation.	a. Unit of area for this holding 1 <input type="checkbox"/> Hectare 2 <input type="checkbox"/> Tanbo 3 <input type="checkbox"/> Manzana	FOR OFFICE USE State _____ Tenure _____ Type _____ Irrigation _____ Cattle _____ Employer code (3b) _____ Livestock head of poultry _____			
2. (If operated "in partnership") This questionnaire concerns the holding you and others operate in partnership.	b. Method of operation 1 <input type="checkbox"/> On own account (Skip to Section II) 2 <input type="checkbox"/> In partnership 3 <input type="checkbox"/> As hired manager (Skip to 3) 4 <input type="checkbox"/> As chieftain (Skip to 4)	HOLOGING OPERATED "On Own Account" OR "In Partnership" (If operated "on own account") - This questionnaire concerns the holding you operate on your own account. First, we want to ask about the tenure of the land. Include all tracts regardless of where they are located, include the place where you live, as well as separate fields, meadows, pastureland, woodland, and wasteland. Do not include communal land or public grazing land which is used jointly with others. The questions apply to all members of your household who are not operating a separate holding. (If operated "in partnership") - First, we want to ask about the tenure of the land. Include all tracts regardless of where they are located. Include the place where you live, as well as separate fields, meadows, pastureland, woodland, and wasteland. Do not include communal land or public grazing land which is used jointly with others. The questions apply to all the land in the partnership - not just your share.			
3. (If operated "as hired manager") This questionnaire concerns the holding you operate as a hired manager.	a. Who is the principal partner? (If partners are of equal rank, consider the older (oldest) as the principal partner.) 1 <input type="checkbox"/> Holder named in item A of the IDENTIFICATION section (Skip to Section II) 2 <input type="checkbox"/> Other person - Name _____ (Surname) _____ (Given name)	5. How much land do you own or hold in ownerlike possession? _____ None <input type="checkbox"/> Area (Report fractions) <input type="checkbox"/> / 10			
	b. Name of other person - 1 <input type="checkbox"/> Appears in Listing Book -> Page _____, Line _____ 2 <input type="checkbox"/> Does not appear in Listing Book	6. How much land do you RENT FROM others for cash or share of the crop or livestock production? _____ None <input type="checkbox"/> Area (Report fractions) <input type="checkbox"/> / 10 a. For the (amount in 6), what did you agree to pay as rent for the year? (Skip to 7) 1 <input type="checkbox"/> Cash only -> (Amount) \$ _____ 2 <input type="checkbox"/> Share of production only (Specify) _____ 3 <input type="checkbox"/> Cash and share of production -> \$ _____ (Amount) and _____ (Share) <input type="checkbox"/> Other (Specify) _____			
		7. How much land do you operate - _____ None <input type="checkbox"/> Area (Report fractions) <input type="checkbox"/> / 10 a. On a squatter basis? _____ <input type="checkbox"/> / 10 b. In exchange for services, upkeep of land, payment of taxes, etc.? _____ <input type="checkbox"/> / 10 c. On same other basis? (Specify) _____ <input type="checkbox"/> / 10			
		8. How much land - _____ None <input type="checkbox"/> Area (Report fractions) <input type="checkbox"/> / 10 a. Do you RENT TO others for cash or share of the production? _____ <input type="checkbox"/> / 10 b. Is OPERATED BY OTHERS on a squatter basis, in exchange for services, upkeep of land, etc.? _____ <input type="checkbox"/> / 10 c. Is operated FOR YOU by a hired manager? (If NONE in "a, b, and c," skip to 10) _____ <input type="checkbox"/> / 10			
		9. Of the (total amount in 8), how much do you own or hold in ownerlike possession? _____ None <input type="checkbox"/> Area (Report fractions) <input type="checkbox"/> / 10			
		10. Taking the (amount in 5) owned, adding the (amount in 6 plus the amount in 7) rented from others or operated rent free, then subtracting the (total amount in 8) rented to or otherwise operated by others, we get _____ The (amount in 10) is all the land in this holding even though part of it may be located elsewhere. The remaining questions refer to these (amount in 10). (Skip to 15)			
		HOLOGING OPERATED "As Hired Manager" OR "As Chieftain" First we want to ask about the land managed or supervised for others. Include all tracts regardless of where they are located. Include separate fields, meadows, pastureland, woodland, and wasteland.			
		11. How much land do you manage or supervise for others _____ <input type="checkbox"/> / 10 (as a hired manager)? (as a chieftain)?			
		12. Of the (amount in 11), how much [is RENTED TO others for cash or for a share of the production, or is OPERATED BY OTHERS on a squatter basis, in exchange for services, upkeep of land, etc.]? [is RENTED TO OR ASSIGNED TO someone for his use?] _____ None <input type="checkbox"/> / 10			
		13. Taking the (amount in 11) that you manage or supervise and subtracting the (amount in 12) rented to or otherwise used by others, we get _____ The (amount in 13) is all the land in this holding operated by you for (name in 3a or 4a). The remaining questions refer to these (amount in 13).			
		14. Of the (amount in 13), how much does your [employer] [tribe or clan] - _____ None <input type="checkbox"/> / 10 a. Own or hold in ownerlike possession? _____ <input type="checkbox"/> / 10 b. RENT FROM others for cash or share of the crop or livestock production? _____ <input type="checkbox"/> / 10 c. Hold on squatter basis? _____ <input type="checkbox"/> / 10 d. Hold in exchange for services, upkeep of land, etc.? _____ <input type="checkbox"/> / 10 (Total of "a, b, c, and d" should be same as amount in 13)			
		EACH HOLOGING 15. Is any part of this holding - the (amount in 10 or 13) - located in another district? { 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to 16) } a. How much is in district (name in item E of the IDENTIFICATION section)? _____ <input type="checkbox"/> / 10 b. What are the names of the other districts and how much of the holding is in each? _____ (Total of "a and b" should be same as amount in 10 or 13)			
		16. Is any parcel of this holding completely separated from the remainder by land or water which is not a part of this holding? { <input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to 17) } a. How many separate parcels are there in all? (Number) _____			
		17. When did you first begin to operate - or have charge of - any part of this holding? _____ (If "1971 or 1972" For the questions that follow, the holder must estimate amounts for the portion of the year when the holding was operated by another person.)			
		Year _____ Month _____ (If in 1971 or 1972)			
		4. (If operated "as chieftain") This questionnaire concerns the holding you supervise as a chieftain.			
		a. What is the name of your tribe or clan? _____ (Skip to introduction to 11)			

Exhibit III-2-1. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES), FORM A-1a--Continued

Section III - TEMPORARY CROPS HARVESTED LAST YEAR, 1971										
<p>This next section concerns all temporary crops harvested last year, 1971; these are crops generally planted each year or grown in rotation. They include grain crops, crops for industrial use, fodder crops, seed crops, vegetables, etc. Report crops for the (amount in 10 or 13) in this holding. For any crop for which the harvest was under way but was not completed in 1971, report area and estimated production for the current production year. For crops grown in succession on the same land, report for each planting or crop. If any crop was shared with others, report total - not just your share.</p>					FOODER CROPS		If YES →		a. How much area was harvested?	
					<p>Were any of the following fodder crops harvested from land in crop rotation -</p> <p>41. Legumes, grasses or cereals cut for hay? <input type="checkbox"/></p> <p>42. Legumes, grasses, or cereals cut for green feed or silage? <input type="checkbox"/></p> <p>43. Other fodder crops - pumpkin, sunflower, cabbage, sugarcane for feed, etc.? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 41 through 43)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>b. What was the total production?</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
CEREALS FOR GRAIN					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>Were any of the following cereals harvested for GRAIN -</p> <p>18. Wheat? <input type="checkbox"/></p> <p>19. Rice - paddy and upland? (Report production in rough) <input type="checkbox"/></p> <p>20. Sorghum? <input type="checkbox"/></p> <p>21. Maize (corn)? <input type="checkbox"/></p> <p>22. Barley? <input type="checkbox"/></p> <p>24. Other cereals for grain - millet, oats, rye, etc.? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 18 through 24)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
LEGUMES FOR GRAIN					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>Were any of the following legumes harvested mainly for GRAIN -</p> <p>25. Edible dry beans - excluding broad beans (see 27) and soybeans (see 38)? <input type="checkbox"/></p> <p>26. Edible dry peas - excluding chick peas, cowpeas, and pigeon peas (see 27)? <input type="checkbox"/></p> <p>27. Other legumes for grain - broad beans, chick peas, cowpeas, pigeon peas, lentils, etc.? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 25 through 27)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
TUBER, ROOT, BULB CROPS					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>Were any of the following tuber, root, or bulb crops harvested FOR FOOD OR FOR LIVESTOCK OR POULTRY FEED -</p> <p>28. Potatoes, Irish or white - early and late crops for all purposes including seed? <input type="checkbox"/></p> <p>29. Manioc (cassava)? <input type="checkbox"/></p> <p>30. Sweet potatoes or yams? <input type="checkbox"/></p> <p>31. Dry onions? <input type="checkbox"/></p> <p>32. Other tuber, root, or bulb crops grown FOR FEED - turnips, sugar beets, etc.? (Specify) <input type="checkbox"/></p> <p>(If for food, report in 46 or 54)</p> <p><input type="checkbox"/> NONE (NO for 28 through 32)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
CROPS FOR INDUSTRIAL USE					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>Were any of the following temporary crops harvested mainly for INDUSTRIAL USE -</p> <p>33. Sugarcane cut for sugar or syrup or for sale to mills? <input type="checkbox"/></p> <p>34. Sugarcane cut for other purposes except for feed or thatching? <input type="checkbox"/></p> <p>35. Cotton? (Report production in "lint and seed") <input type="checkbox"/></p> <p>36. Groundnuts (peanuts)? <input type="checkbox"/></p> <p>37. Tobacco? <input type="checkbox"/></p> <p>38. Soybeans? <input type="checkbox"/></p> <p>40. Other temporary crops mainly for industrial use - castor beans, sesame, etc.? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 33 through 40)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
FIELD SEEDS					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>Were any of the following field seed crops harvested -</p> <p>44. Alfalfa seed? <input type="checkbox"/></p> <p>45. Other field seed crops - lespedeza, orchardgrass, white clover, etc.? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 44 through 45)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
VEGETABLES AND MELONS FOR HOME USE					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>46. Were any vegetables or melons grown mainly for USE OF THE HOUSEHOLDS ON THIS HOLDING - including vegetables and melons from kitchen or home gardens? <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 46)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
VEGETABLES AND MELONS FOR SALE					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>Were any of the following vegetables or melons grown mainly for SALE FOR HUMAN CONSUMPTION -</p> <p>47. Cabbage? <input type="checkbox"/></p> <p>48. Watermelons? <input type="checkbox"/></p> <p>49. Cantaloupes and other melons? <input type="checkbox"/></p> <p>50. Tomatoes? <input type="checkbox"/></p> <p>51. Beans - harvested green? <input type="checkbox"/></p> <p>52. Peas - harvested green? <input type="checkbox"/></p> <p>53. Maize or sweet corn - harvested green? <input type="checkbox"/></p> <p>54. Other vegetables mainly for sale? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 47 through 54)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
FLOWERS, BULBS, PLANTS					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>55. Were any flowers, flower bulbs, corms, or ornamental plants grown for sale, seed, or industrial uses? (Specify general class) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 55)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
OTHER TEMPORARY CROPS					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>56. Were any other temporary crops harvested - that is, crops generally planted each year or grown in rotation? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (NO for 56)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	
57. TOTAL CROP AREA IN TEMPORARY CROPS					If YES →		a. How much area was harvested?		b. What was the total production?	
<p>(Add amounts in 18 through 56)</p> <p><input type="checkbox"/> NONE (NO for 57)</p>					<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>		<p>Area</p> <p>Quantity</p> <p>Unit (Mark X or specify other)</p> <p>Metric Quin- Kilo- Other tons tals grams (Specify)</p>	

Exhibit III-2-1. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES), FORM A-1a--Continued

Section IV - PERMANENT CROPS																																																																
<p>This next section concerns permanent (or perennial) crops, trees, vines, and berries last year, 1971. Report for this holding only. For any crop for which the harvest was under way but was not completed in 1971, report area and estimated production for the current year. If any crop was shared with others, report total - not just your share.</p>																																																																
<p>CITRUS FRUITS</p> <p>Were there any of the following citrus fruit trees on this holding -</p>																																																																
<p>58. Orange(s) - all varieties? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>59. Lemon(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>60. Other citrus fruit trees - lime(s), tangerine(s), grapefruit, etc.? (Specify) <input type="checkbox"/> YES <input type="checkbox"/> NO</p>																																																																
<p>OTHER CULTIVATED TREES, PLANTS, VINES</p> <p>Were there any of the following other cultivated fruit or nut trees, plants, or vines on this holding -</p>																																																																
<p>61. Peach(es) - including nectarines? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>62. Fig(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>63. Banana(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>64. Plantain(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>65. Pineapple(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>66. Almond(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>67. English walnut(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>68. Grape(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>69. Other cultivated fruit or nut trees, plants, or vines - apple(s), pear(s), plum(s), cherry(ies), papaya, etc.? (Specify) <input type="checkbox"/> YES <input type="checkbox"/> NO</p>																																																																
<p>CROPS FOR INDUSTRIAL USE</p> <p>Were any of the following permanent (perennial) crops grown mainly for industrial use -</p>																																																																
<p>70. Coffee? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>71. Cocoa? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>72. Tea? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>73. Coconut(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>74. Olive(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>75. Sisal? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>76. Rubber? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>77. Other permanent (perennial) crops mainly for industrial use - oil palm, jute, mulberry, etc.? (Specify) <input type="checkbox"/> YES <input type="checkbox"/> NO</p>																																																																
<p>CULTIVATED SMALL FRUITS AND BERRIES</p> <p>78. Were any cultivated strawberries, raspberries, blueberries, or other small fruits or berries grown on this holding? (Specify) <input type="checkbox"/> YES <input type="checkbox"/> NO</p>																																																																
<p>PERMANENT GRASSES</p> <p>79. Were any permanent grasses cut for hay (hay cut from permanent grassland even if pastured or grazed before or after the hay was cut)? <input type="checkbox"/> YES <input type="checkbox"/> NO</p>																																																																
<p>Section V - INTERPLANTED AND SUCCESSION CROPS LAST YEAR, 1971</p>																																																																
<p>INTERPLANTED CROPS</p> <p>83. Of all the temporary and permanent crops reported (in Sections III and IV), were any of them interplanted (intercropped) last year, 1971 - that is, grown on the same land at the same time? (Report information for each crop separately. For example, if corn and beans were interplanted on 5 hectares of land in "skip-row" pattern so that the respondent reported 3 hectares for corn and 2 hectares for beans, record as follows: Write "corn" on one line and "beans" on another line of 83a, the one figure of "5 hectares" in 83b, and "3 hectares" for corn and "2 hectares" for beans in 83c; however, if the corn was planted at normal distance and beans at something other than the normal distance so that the respondent reported 5 hectares for corn and 3 4/10 for beans, report "5 hectares" for corn and "3 4/10 hectares" for beans in 83c - assuming "hectare" as the unit of measure.)</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to 84)</p>																																																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">a. Which crops were interplanted?</th> <th colspan="2">b. How much land was interplanted?</th> <th colspan="2">c. How much of the (amount in 83b) did you report (in Sections III and IV) for each crop?</th> <th colspan="2">d. Duplicated area</th> </tr> <tr> <th>Area</th> <th>Area</th> <th>Area</th> <th>Area</th> <th>Temporary</th> <th>Permanent</th> </tr> </thead> <tbody> <tr> <td></td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> </tr> <tr> <td></td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> </tr> <tr> <td></td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> </tr> <tr> <td></td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> </tr> <tr> <td></td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> </tr> <tr> <td>TOTAL</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> <td>/10</td> </tr> </tbody> </table>										a. Which crops were interplanted?	b. How much land was interplanted?		c. How much of the (amount in 83b) did you report (in Sections III and IV) for each crop?		d. Duplicated area		Area	Area	Area	Area	Temporary	Permanent		/10	/10	/10	/10	/10	/10		/10	/10	/10	/10	/10	/10		/10	/10	/10	/10	/10	/10		/10	/10	/10	/10	/10	/10		/10	/10	/10	/10	/10	/10	TOTAL	/10	/10	/10	/10	/10	/10
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TOTAL	/10	/10	/10	/10	/10	/10																																																										
<p>SUCCESSION CROPS</p> <p>84. Of all the temporary and permanent crops reported (in Sections III and IV), were any harvested in succession on the same land last year, 1971? (Report each crop separately. For example, if rice was harvested on 2 hectares of land, followed by a second crop of rice on the same land, report "rice" as the first crop in 84a; report "rice" as the second crop in 84a and "2 hectares" in 84b on the line for "second crop" - assuming "hectare" as the unit of measure.)</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to Section VI)</p>																																																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">e. Which were the succession crops?</th> <th colspan="2">b. How much area was planted in each crop?</th> </tr> <tr> <th colspan="2"></th> <th colspan="2">Area</th> </tr> </thead> <tbody> <tr> <td>First crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>Second crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>Third crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>First crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>Second crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>Third crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>First crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>Second crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td>Third crop</td> <td></td> <td colspan="2">/10</td> </tr> <tr> <td colspan="2">TOTAL</td> <td colspan="2">/10</td> </tr> </tbody> </table> <p style="text-align: right;">c. Greatest number in succession →</p>										e. Which were the succession crops?		b. How much area was planted in each crop?				Area		First crop		/10		Second crop		/10		Third crop		/10		First crop		/10		Second crop		/10		Third crop		/10		First crop		/10		Second crop		/10		Third crop		/10		TOTAL		/10								
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Exhibit III-2-1. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES), FORM A-1a--Continued

Section VI - LAND UTILIZATION LAST YEAR, 1971				Section VIII - LIVESTOCK AND POULTRY																			
<p>This next section concerns the use of the land in this holding during last year, 1971 - whether used for crops, pastureland, woodland, or other purposes. If used for more than one purpose, report the land in the first category mentioned; for example, if crops were harvested from land which was also used for pasture, report as cropland harvested - not as cropland used for pasture.</p>				<p>This next section concerns livestock and poultry. Report all livestock and poultry on this holding, whether owned by you, by your landlord, or by someone else. Include livestock kept on communal or public grazing land if owned [by you] [by your employer] [jointly by your tribe or clan]. If livestock is associated with more than one holding, report animals that are kept on this holding during the night.</p>																			
<p>85. (Transcribe amount from 10 or 13) Earlier, we determined that there were in this holding</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">FOR OFFICE USE</th> <th style="width: 35%;">Area</th> <th style="width: 10%;">/10</th> </tr> <tr> <td>Temporary crops</td> <td></td> <td>/10</td> </tr> <tr> <td>Permanent crops</td> <td></td> <td>/10</td> </tr> <tr> <td>Permanent grasses for hay</td> <td></td> <td>/10</td> </tr> </table>				FOR OFFICE USE	Area	/10	Temporary crops		/10	Permanent crops		/10	Permanent grasses for hay		/10	<p>ANIMALS ON HOLDING</p> <p>Are there any of the following animals now on this holding, or on communal grazing land -</p> <p style="text-align: right;">If YES → a. How many?</p> <p>YES 5</p>							
FOR OFFICE USE	Area	/10																					
Temporary crops		/10																					
Permanent crops		/10																					
Permanent grasses for hay		/10																					
<p>Of this amount, how much was -</p>				<p>89. Horses - all ages? <input type="checkbox"/></p> <p>(Total of (1) and (2) should equal 89)</p> <p style="margin-left: 20px;">(1) Under 3 years old? <input type="checkbox"/></p> <p style="margin-left: 20px;">(2) 3 years or older? <input type="checkbox"/></p>																			
<p>a. In gardens, fields, or tracts from which temporary crops were harvested or was in permanent crops, including any land in fruit and nut trees, vines, and berries? <input type="checkbox"/></p> <p>b. Cropland (land cultivated at some time in last 5 years) that was used only for pasture or grazing? <input type="checkbox"/></p> <p>c. Used for crops but on which all crops failed? <input type="checkbox"/></p> <p>d. Cropland that was idle or fallow - including land used only for soil improvement crops? <input type="checkbox"/></p> <p>e. In woods or forests which have or will have value for wood, timber, or other forest products? <input type="checkbox"/></p> <p>f. In permanent pasture or grazing land - that is, grassland not cultivated in last 5 years? (Exclude cropland and woodland, which would be reported in 85b or 85e) <input type="checkbox"/></p> <p>g. Other land, including house lots, barn lots, roads, lanes, ditches, wasteland, etc.? <input type="checkbox"/></p> <p>h. TOTAL (Sum of 85a through 85g; total must be same as amount in 85) <input type="checkbox"/></p>				<p>90. Mules - all ages? <input type="checkbox"/></p> <p>91. Asses - all ages? <input type="checkbox"/></p> <p>92. Cattle and calves, including oxen - all ages? <input type="checkbox"/></p> <p style="margin-left: 20px;">(1) Cows and heifers that have calved? <input type="checkbox"/></p> <p style="margin-left: 20px;">(2) Heifers 1 year or older that have not yet calved? <input type="checkbox"/></p> <p style="margin-left: 20px;">(3) Female calves under 1 year old? <input type="checkbox"/></p> <p style="margin-left: 20px;">(4) Male cattle 1 year or older? <input type="checkbox"/></p> <p style="margin-left: 20px;">(5) Male calves under 1 year old? <input type="checkbox"/></p> <p>(Total of (1) to (5) should equal 92)</p> <p>93. Sheep and lambs - all ages? <input type="checkbox"/></p> <p style="margin-left: 20px;">(1) Lambs under 1 year old? <input type="checkbox"/></p> <p style="margin-left: 20px;">(2) Ewes and ewe lambs 1 year or older? <input type="checkbox"/></p> <p style="margin-left: 20px;">(3) Male sheep 1 year or older? <input type="checkbox"/></p> <p>(Total of (1) to (3) should equal 93)</p>																			
<p>86. In terms of crop area on this holding last year, it was determined that the -</p> <p>a. TOTAL CROP AREA WAS (Amount in 57 plus amount in 82) <input type="checkbox"/></p> <p>b. DUPLICATED CROP AREA IN INTERPLANTED AND SUCCESSION CROPS WAS (Total in 83d plus total in 84b) <input type="checkbox"/></p> <p>c. LAND AREA IN CROPS ALLOWING FOR INTERPLANTING AND SUCCESSION CROPS WOULD BE (Amount in 86a minus amount in 86b) <input type="checkbox"/></p> <p>(If the amount in 86c is approximately the same as the amount in 85a, continue with Section VII; if not, review the figures in Sections III, IV, V, and VI, and correct accordingly)</p>				<p>94. Goats and kids - all ages? <input type="checkbox"/></p> <p style="margin-left: 20px;">(1) Under 1 year old? <input type="checkbox"/></p> <p style="margin-left: 20px;">(2) 1 year or older? <input type="checkbox"/></p> <p>(Total of (1) and (2) should equal 94)</p> <p>95. Hogs and pigs - all ages? <input type="checkbox"/></p> <p style="margin-left: 20px;">(1) Under 6 months old? <input type="checkbox"/></p> <p style="margin-left: 20px;">(2) Sows and gilts 6 months or older kept for breeding? <input type="checkbox"/></p> <p style="margin-left: 20px;">(3) Other hogs and pigs 6 months or older? <input type="checkbox"/></p> <p>(Total of (1) to (3) should equal 95)</p>																			
<p style="text-align: center;">Section VII - IRRIGATION AND FERTILIZATION LAST YEAR, 1971</p>				<p>96. Other domestic animals or animals in captivity now on this holding - camels, buffaloes, llamas, rabbits, etc. - all ages? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (No for 89 through 96. If NONE, skip to 103)</p>																			
<p>87. Of the (amount in 85) in this holding, was any part irrigated last year? Irrigation refers to supplying land with water other than rainfall. When water is collected and brought to the land later, consider this as irrigation; also include purposeful flooding of land by rivers, streams, or dams.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to 88)</p>				<p>ANIMALS MILKED</p> <p>Were any of the following animals milked yesterday -</p> <p style="text-align: right;">If YES → a. How many?</p> <p>YES <input type="checkbox"/></p>																			
<p>a. How much land was irrigated? <input type="checkbox"/></p> <p>b. Of this irrigated land, how much was land from which temporary crops were harvested or was in permanent crops, including any land in fruit and nut trees, vines and berries? <input type="checkbox"/></p>				<p>97. Cows (cattle)? <input type="checkbox"/></p> <p>98. Goats? <input type="checkbox"/></p> <p>99. Other animals - sheep, camels, buffaloes, etc.? (Specify) <input type="checkbox"/></p> <p><input type="checkbox"/> NONE (No for 97 through 99)</p>																			
<p>88. On the (amount in 85) in this holding, were any chemical or other commercial fertilizers applied last year? Include rock phosphate but do not include lime or gypsum; also, do not include farmyard manure or crop residue.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to Section VIII)</p>				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th rowspan="2" style="width: 15%;">Quantity</th> <th colspan="4" style="width: 40%;">Unit (Mark X or specify other)</th> <th rowspan="2" style="width: 10%;">/10</th> </tr> <tr> <th style="width: 10%;">Metric tons</th> <th style="width: 10%;">Quintals</th> <th style="width: 10%;">Kilograms</th> <th style="width: 10%;">Other (Specify)</th> </tr> <tr> <td>a. What was the total amount of fertilizer used? <input type="checkbox"/></td> <td></td> <td></td> <td></td> <td></td> <td>/10</td> </tr> </table>				Quantity	Unit (Mark X or specify other)				/10	Metric tons	Quintals	Kilograms	Other (Specify)	a. What was the total amount of fertilizer used? <input type="checkbox"/>					/10
Quantity	Unit (Mark X or specify other)				/10																		
	Metric tons	Quintals	Kilograms	Other (Specify)																			
a. What was the total amount of fertilizer used? <input type="checkbox"/>					/10																		

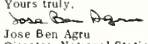
Exhibit III-2-1. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES), FORM A-1a--Continued

Section VIII - LIVESTOCK AND POULTRY - Continued		Section IX - AGRICULTURAL POWER, EQUIPMENT, AND TRANSPORT FACILITIES	
ANIMALS FOR TRANSPORT OR DRAFT PURPOSES Were any of the following animals now on this holding used for transport or draft purposes at any time last year - that is, for carrying loads, pulling or drawing loads, plowing, threshing, grinding, lifting water, etc. - 100. Cattle, including oxen? <input type="checkbox"/> YES <input type="checkbox"/> NO 101. Buffaloes? <input type="checkbox"/> YES <input type="checkbox"/> NO 102. Other animals - camels, elephants, llamas, etc.? (Specify) _____ <input type="checkbox"/> NONE (No for 100 through 102)		These next questions are about power, equipment, and transport facilities. 109. Last year, was there electric current for use - a. In the dwelling? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No b. Elsewhere on this holding? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No	
POULTRY ON HOLDING Are there any of the following kinds of poultry now on this holding - 103. Chickens - all ages? <input type="checkbox"/> YES <input type="checkbox"/> NO (Total of (1) and (2) should equal 103) { (1) Baby chicks and other chickens under 4 months old? _____ (2) All chickens 4 months or older? _____ 104. Ducks and ducklings - all ages? <input type="checkbox"/> YES <input type="checkbox"/> NO 105. Geese and goslings - all ages? <input type="checkbox"/> YES <input type="checkbox"/> NO 106. Turkeys and poults - all ages? <input type="checkbox"/> YES <input type="checkbox"/> NO 107. Other poultry - pigeons, guinea fowls, etc. - all ages? (Specify) _____ <input type="checkbox"/> NONE (No for 103 through 107)		110. Was the agricultural work in the fields or elsewhere on this holding done - a. In part by animal power? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No b. In part by mechanical power - that is, by machines propelled or operated by petrol, oil, gas, steam, water, wind, electricity? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (If NO in both 110a and 110b, skip to 112)	
Section IX - SALE OF AGRICULTURAL PRODUCTS This next section refers to the sale of agricultural products of this holding during last year, 1971. Agricultural products include crops, livestock, livestock products, poultry, poultry products, forest products, fish, etc. 108. Did the total cash received during 1971 from the sale of agricultural products of this holding amount to - 8 1 <input type="checkbox"/> \$10,000 or more? 2 <input type="checkbox"/> \$ 5,000 to \$9,999? 3 <input type="checkbox"/> \$ 1,000 to \$4,999? 4 <input type="checkbox"/> \$ 100 to \$ 999? 5 <input type="checkbox"/> Less than \$100? (Skip to Section X) a. Did half or more of the cash received from the sale of agricultural products come from the sale of - (1) Crops? 1 <input type="checkbox"/> Yes (Skip to Section X) 2 <input type="checkbox"/> No (2) Livestock and poultry - including livestock products and poultry products? 1 <input type="checkbox"/> Yes (Skip to Section X) 2 <input type="checkbox"/> No (3) Other agricultural products? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to Section X) b. What were the other agricultural products? _____ _____ _____ _____		111. Last year, was any of the following equipment used for agricultural work on this holding - YES NO (1) Animal-drawn plows? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (2) Tractor-operated plows? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (3) Wheel tractors - excluding single-axle tractors? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (4) Single-axle tractors - including power tillers? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (5) Tracklaying tractors? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (6) Grain combines (harvester-threshers)? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (7) Other threshers (engine-operated)? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (8) Stationary internal combustion engines? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (9) Electric motors, not counting those used only for household purposes? 1 <input type="checkbox"/> 2 <input type="checkbox"/>	
		112. How many of the following motor vehicles are NOW kept on this holding - NONE Number (1) Jeeps, station wagons, motor trucks? <input type="checkbox"/> (2) Automobiles? <input type="checkbox"/>	
		NOTES _____ _____ _____ _____	

Exhibit III-2-1. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES), FORM A-1a--Continued

Section XI - CHARACTERISTICS OF HOLDER'S HOUSEHOLD					NOTES																																																																		
<p>113. These next questions relate to the people who live in your housing unit. What are the names, relationship, and ages of all the persons who live in your housing unit? Include infants, hired workers, and other persons who usually live with you. (List holder on first line.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Line No.</th> <th style="width: 25%;">a. Name</th> <th style="width: 15%;">b. Relationship to holder</th> <th style="width: 10%;">c. Sex (M or F)</th> <th style="width: 10%;">d. Age as of last birthday</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td>HOLDER</td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>					Line No.	a. Name	b. Relationship to holder	c. Sex (M or F)	d. Age as of last birthday	1		HOLDER			2					3					4					5					6					7					8					9					10					11					12					<p>(Use this space to comment on anything unusual about this holding - the type of operation, use of land, amount of production, etc. Always enter the number of the item to which each remark refers. You may use this space also to make a rough sketch of the separate fields or parcels of land.)</p>	
Line No.	a. Name	b. Relationship to holder	c. Sex (M or F)	d. Age as of last birthday																																																																			
1		HOLDER																																																																					
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<p>114. How many other households are living on this holding? <input type="checkbox"/> None (Number) _____</p>																																																																							
Section XII - HIRED WORKERS																																																																							
<p>This next section of the questionnaire concerns workers hired to do any part of the agricultural work in the fields or elsewhere on this holding during last year, 1971.</p>																																																																							
<p>115. Were any persons hired for pay IN CASH to do any agricultural work on this holding, whether or not they lived on this holding? Do NOT include members of your family (persons related to you) who are living with you.</p> <p>1 <input type="checkbox"/> Yes x <input type="checkbox"/> No (Skip to Section XIII)</p> <p>a. What part of the agricultural work on this holding was done by these hired workers?</p> <p>1 <input type="checkbox"/> Less than half 2 <input type="checkbox"/> Half or more</p> <p>b. What was the total amount of cash paid to these persons last year?</p> <p>1 <input type="checkbox"/> Less than \$25 2 <input type="checkbox"/> \$25 to \$99 3 <input type="checkbox"/> \$100 to \$499 4 <input type="checkbox"/> \$500 to \$999 5 <input type="checkbox"/> \$1000 or more</p>																																																																							
Section XIII - SOURCE OF INCOME					Section XIV - ENUMERATOR'S RECORD																																																																		
<p>This last section relates to the source of your family income last year, 1971. Your family consists of yourself and all persons in this household who are related to you. Income refers to gross cash income from all sources, before deductions for taxes, etc. Agricultural products include crops, livestock, livestock products, poultry, poultry products, forest products, fish, etc.</p>					RECORD OF VISITS																																																																		
<p>116. Did most of your family's total gross cash income for last year come from the sale of agricultural products of this holding, or did it come from other sources such as wages, salaries, rents, pensions, etc.?</p> <p>1 <input type="checkbox"/> Sale of agricultural products of this holding 2 <input type="checkbox"/> Other sources</p> <p>a. Did cash income from other sources amount to a total of \$100 or more?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>					Visit	Date	Notes																																																																
					First																																																																		
					Second																																																																		
					Third																																																																		
					Fourth																																																																		
Principal respondent		Name		Relationship to holder 1 <input type="checkbox"/> Holder <input type="checkbox"/> Other (Specify) _____ 2 <input type="checkbox"/> Wife																																																																			
<input type="checkbox"/> Noninterview (Explain) _____																																																																							
Date completed				Enumerator's signature																																																																			

Exhibit III-2-2. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES-NATIONAL CERTAINTY), FORM A-1c

CONFIDENTIAL - This inquiry is required by law. All information will be held strictly confidential. Form A-1c (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE			
1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (Provinces - National Certainty)		IDENTIFICATION			
		A. Name of holder Name of holding: _____		B. Listing Book (A-2c) - Page _____, Line _____	C. Preliminary A-1c No. _____
		D. Name of province _____	E. Name of district _____	F. PSU No. _____	G. Final A-1c No. _____
		H. Sampling weight _____			
NOTE: Throughout the questionnaire, the terms "you" and "your" refer to the holder.					
Dear Fellow Citizen: The National Statistical Office is now engaged in the big job of taking a nationwide Census of Agriculture in Agrostan. Your cooperation will help us to obtain an accurate count of agricultural holdings and the amount of production for your district. Questionnaires are being distributed by mail to persons operating or managing large or specialized agricultural holdings, similar questionnaires are being filled for a selected group of other types of holdings in your district. You are requested to examine the questionnaire and fill it out promptly. The instructions on the questionnaire will help you to answer the appropriate questions. The person who fills the questionnaire for this holding should be the holder; that is, the person who makes the day-to-day decisions concerning the operations of the holding and who actually does the work or directly supervises the work of others. Determination of the holder also determines the answer to question 1(b), which is "Method of operation." If the holder is an individual who owns or rents land for his own use, the method of operation is "On own account." Mark the box for "On own account" and skip to Section II. If the holder shares in the decisions and operations of the holding with others, the method of operation is "In partnership." Mark the box for "In partnership" and go to question 2. If the holder is employed by others to operate the holding and makes the day-to-day decisions concerning the operations, the method of operation is "As hired manager." Mark the box for "As hired manager" and skip to question 3. If the holder is a chieftain or headman of a tribe or clan and has supervision over tribal land, the method of operation is "As chieftain." Mark the box for "As chieftain" and skip to question 4. Please note the different series of questions for each method of operation. Be sure to mark the correct method of operation in 1(b) and then follow carefully the skip instructions for that method. A local census taker will call at the holding soon to pick up the questionnaire and review it with you. He will be glad to answer any questions you may have. Please have the questionnaire ready. Do not return it to this office. Please write the name of the holder in item A above. In answering the questions, please refer to any records you may have; if records are not available, please give your best estimate. You can be assured that the information you enter on the questionnaire will be kept confidential and used only to obtain totals for your district. Thank you for your assistance and cooperation.					
Yours truly,  Jose Ben Agui Director, National Statistical Office					
Section I - GENERAL INFORMATION					
1. Unit of area and method of operation.		FOR OFFICE USE			
a. Unit of land measure for this holding. (Mark only one unit and report all land area items in that unit)		Size Tenure Type Irrigation Crop Mo. Employer code (3b) Livestock and/or poultry			
1 <input type="checkbox"/> Hectare 2 <input type="checkbox"/> Tanbo 3 <input type="checkbox"/> Manzana					
b. Method of operation 1 <input type="checkbox"/> On own account (Skip to Section II) 2 <input type="checkbox"/> In partnership 3 <input type="checkbox"/> As hired manager (Skip to 3) 4 <input type="checkbox"/> As chieftain (Skip to 4)					
2. (If operated "in partnership") This questionnaire concerns the holding you and others operate in partnership.		a. Who is the principal partner? (If partners are of equal rank, consider the older (oldest) as the principal partner.) 1 <input type="checkbox"/> Holder named in item A of the IDENTIFICATION section (Skip to Section II) 2 <input type="checkbox"/> Other person - Name _____ (Surname) _____ (Given name) (Skip to Section II)			
3. (If operated "as hired manager") This questionnaire concerns the holding you operate as a hired manager.		a. What is your employer's name? _____ (Name of person or agency) b. Is your employer - 1 <input type="checkbox"/> A private person? 2 <input type="checkbox"/> A corporation? 3 <input type="checkbox"/> A cooperative? 4 <input type="checkbox"/> A government agency? _____ Other? (Specify) _____ c. What is the mailing address of your employer? _____ (Province) _____ (District) _____ (Urban place or hamlet) _____ (Road or highway) (Skip to introduction to 11)			
4. (If operated "as chieftain") This questionnaire concerns the holding you supervise as a chieftain.		a. What is the name of your tribe or clan? _____ (Skip to introduction to 11)			
		Section II - TENURE OF HOLDING			
HOLOGING OPERATED "On Own Account" OR "In Partnership"		(If operated "on own account") - This questionnaire concerns the holding you operate on your own account. First, we want to ask about the tenure of the land. Include all tracts regardless of where they are located, include the place where you live, as well as separate fields, meadows, pastureland, woodland, and wasteland. Do not include communal land or public grazing land which is used jointly with others. The questions apply to all members of your household who are not operating a separate holding. (If operated "in partnership") - First, we want to ask about the tenure of the land. Include all tracts regardless of where they are located. Include the place where you live, as well as separate fields, meadows, pastureland, woodland, and wasteland. Do not include communal land or public grazing land which is used jointly with others. The questions apply to all the land in the partnership - not just your share.			
		None (Report fractions)			
		5. How much land do you own or hold in ownerlike possession? _____ <input type="checkbox"/> $\frac{\quad}{10}$			
		6. How much land do you RENT FROM others for cash or share of the crop or livestock production? _____ <input type="checkbox"/> $\frac{\quad}{10}$ a. For the (amount in 6), what did you agree to pay as rent for the year? (Skip to 7) 1 <input type="checkbox"/> Cash only -> (Amount) \$ _____ 2 <input type="checkbox"/> Share of production only (Specify) _____ 3 <input type="checkbox"/> Cash and share of production -> \$ (Amount) and (Share) _____ _____ Other (Specify) _____			
		7. How much land do you operate - _____ <input type="checkbox"/> $\frac{\quad}{10}$ a. On a squatter basis? _____ <input type="checkbox"/> $\frac{\quad}{10}$ b. In exchange for services, upkeep of land, payment of taxes, etc.? _____ <input type="checkbox"/> $\frac{\quad}{10}$ c. On some other basis? (Specify) _____ <input type="checkbox"/> $\frac{\quad}{10}$			
		8. How much land - _____ <input type="checkbox"/> $\frac{\quad}{10}$ a. Do you RENT TO others for cash or share of the production? _____ <input type="checkbox"/> $\frac{\quad}{10}$ b. IS OPERATED BY OTHERS on a squatter basis, in exchange for services, upkeep of land, etc.? _____ <input type="checkbox"/> $\frac{\quad}{10}$ c. Is operated FOR YOU by a hired manager? (If NONE in "a, b, and c," skip to 10) _____ <input type="checkbox"/> $\frac{\quad}{10}$			
		9. Of the (total amount in 8), how much do you own or hold in ownerlike possession? _____ <input type="checkbox"/> $\frac{\quad}{10}$			
		10. Taking the (amount in 5) owned, adding the (amount in 6 plus the amount in 7) rented from others or operated rent free, then subtracting the (total amount in 8) rented to or otherwise operated by others, we get _____ $\frac{\quad}{10}$ The (amount in 10) is all the land in this holding even though part of it may be located elsewhere. The remaining questions refer to these (amount in 10). (Skip to 15)			
HOLDING OPERATED "As Hired Manager" OR "As Chieftain"		First we want to ask about the land managed or supervised for others. Include all tracts regardless of where they are located. Include separate fields, meadows, pastureland, woodland, and wasteland. 11. How much land do you manage or supervise for others (as a hired manager)? (as a chieftain)? _____ <input type="checkbox"/> $\frac{\quad}{10}$ 12. Of the (amount in 11), how much [is RENTED TO others for cash or for a share of the production, or is OPERATED BY OTHERS on a squatter basis, in exchange for services, upkeep of land, etc.]? [is RENTED TO OR ASSIGNED TO someone for his use]? _____ <input type="checkbox"/> $\frac{\quad}{10}$			
		13. Taking the (amount in 11) that you manage or supervise and subtracting the (amount in 12) rented to or otherwise used by others, we get _____ $\frac{\quad}{10}$ The (amount in 13) is all the land in this holding operated by you far (name in 3a or 4a). The remaining questions refer to those (amount in 13).			
		14. Of the (amount in 13), how much does your [employer] [tribe or clan] - _____ <input type="checkbox"/> $\frac{\quad}{10}$ a. Own or hold in ownerlike possession? _____ <input type="checkbox"/> $\frac{\quad}{10}$ b. RENT FROM others for cash or share of the crop or livestock production? _____ <input type="checkbox"/> $\frac{\quad}{10}$ c. Hold on squatter basis? _____ <input type="checkbox"/> $\frac{\quad}{10}$ d. Hold in exchange for services, upkeep of land, etc.? _____ <input type="checkbox"/> $\frac{\quad}{10}$ (Total of "a, b, c, and d" should be same as amount in 13)			
EACH HOLOGING		15. Is any part of this holding - the (amount in 10 or 13) - located in another district? { 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to 16) } a. How much is in district (name in item E of the IDENTIFICATION section)? _____ $\frac{\quad}{10}$ b. What are the names of the other districts and how much of the holding is in each? _____ $\frac{\quad}{10}$ (Total of "a and b" should be same as amount in 10 or 13)			
		16. Is any parcel of this holding completely separated from the remainder by land or water which is not a part of this holding? 1 <input type="checkbox"/> Yes x <input type="checkbox"/> No (Skip to 17) a. How many separate parcels are there in all? (Number) _____			
		17. When did you first begin to operate - or have charge of - any part of this holding? _____ (If "1971 or 1972" For the questions that follow, the holder must estimate amounts for the portion of the year when the holding was operated by another person.)			
		Year _____ Month _____ (If in 1971 or 1972)			
U.S. DEPARTMENT OF COMMERCE - BUREAU OF THE CENSUS					

*Exhibit III-2-2. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (PROVINCES-NATIONAL CERTAINTY),
FORM A-1c--Continued*

Form A-1c (AGROSTAN)

Items 18 to 116 same as Form A-1a

Exhibit III-2-3. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY), FORM A-1b

Form A-1b (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE		IDENTIFICATION															
1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (Northern Territory)		A. Name of holder		B. Listing Book (A-2b)		Page	Line												
		O. Zone		E. District		F. PSU No.													
						FOR OFFICE USE													
						G. Final A-1b No.	H. Sampling weight												
ENUMERATOR: If the respondent is someone other than the holder, be sure he understands that the terms "you" and "your" refer to the holder.																			
Section I - METHOD OF OPERATION AND TENURE				Section II - TEMPORARY CROPS HARVESTED THIS YEAR, 1971															
1. Method of operation <input type="checkbox"/> 1 On own account <input type="checkbox"/> 2 In partnership (Skip to 3) <input type="checkbox"/> 3 As chieftain (Skip to 4) <input type="checkbox"/> 4 As hired manager (Skip to 5)				FOR OFFICE USE <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Yes/No</td><td></td></tr> <tr><td>Yield/ton</td><td></td></tr> <tr><td>Livestock and/or poultry</td><td></td></tr> <tr><td>Type</td><td></td></tr> <tr><td>Size</td><td></td></tr> <tr><td>Cwd No.</td><td></td></tr> </table>				Yes/No		Yield/ton		Livestock and/or poultry		Type		Size		Cwd No.	
Yes/No																			
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Livestock and/or poultry																			
Type																			
Size																			
Cwd No.																			
2. (If operated "on own account") This questionnaire concerns the holding you operated on your own account. Include all land on which you grew crops or kept livestock at any time this year, 1971. Do not consider public or communal grazing land as part of this holding. Of the land in this holding, was any - (1) Assigned to you by your tribe or clan? Yes <input type="checkbox"/> No <input type="checkbox"/> (2) Owned by you? Yes <input type="checkbox"/> No <input type="checkbox"/> (3) Rented FROM others for cash or a share of the production? Yes <input type="checkbox"/> No <input type="checkbox"/> (4) Used on a squatter basis? Yes <input type="checkbox"/> No <input type="checkbox"/> (5) Used on some other basis? Yes <input type="checkbox"/> No <input type="checkbox"/> (Specify) _____ (Skip to Section III)				This section concerns all temporary crops harvested this year, 1971. These are crops generally planted each year or grown in rotation. Report crops for this holding only. CEREALS FOR GRAIN Were any of the following cereals harvested for GRAIN - Yes 6. Wheat? 6 <input type="checkbox"/> 7. Rice - paddy (irrigated)? 7 <input type="checkbox"/> 8. Rice - upland? 8 <input type="checkbox"/> 9. Sorghum? 9 <input type="checkbox"/> 10. Maize (corn)? 10 <input type="checkbox"/> 11. Barley? 11 <input type="checkbox"/> 13. Other cereals for grain - millet, oats, rye, etc.? 13 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 6 through 13)															
3. (If operated "in partnership") This questionnaire concerns the holding you operated in partnership with others at any time this year, 1971. a. Who is the principal partner? (If partners are of equal rank, consider the older (oldest) as the principal partner.) <input type="checkbox"/> Holder named in item A of the Identification Section (Skip to 3c) <input type="checkbox"/> Other person - Name _____ (Surname) _____ (Given name) b. Name of other person <input type="checkbox"/> Appears in Listing Book -> Page _____, Line _____ <input type="checkbox"/> Does not appear in Listing Book (Skip to Section III) c. Include all land on which you and your partner(s) grew crops or kept livestock at any time this year, 1971. Do not consider public or communal grazing land as part of the holding. Of the land in this holding, was any - (1) Assigned to you by your tribe or clan? Yes <input type="checkbox"/> No <input type="checkbox"/> (2) Owned by you? Yes <input type="checkbox"/> No <input type="checkbox"/> (3) Rented FROM others for cash or a share of the production? Yes <input type="checkbox"/> No <input type="checkbox"/> (4) Used on a squatter basis? Yes <input type="checkbox"/> No <input type="checkbox"/> (5) Used on some other basis? Yes <input type="checkbox"/> No <input type="checkbox"/> (Specify) _____ (Skip to Section III)				LEGUMES FOR GRAIN Were any of the following legumes harvested mainly for GRAIN - Yes 14. Edible dry beans - excluding broad beans (see 16) and soybeans (see 27)? 14 <input type="checkbox"/> 15. Edible dry peas - excluding chick peas, cowpeas, and pigeon peas (see 16)? 15 <input type="checkbox"/> 16. Other legumes for grain - broad beans, chick peas, cowpeas, pigeon peas, lentils, etc.? 16 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 14 through 16)															
4. (If operated "as chieftain") At any time this year, 1971, did you operate or supervise - a. Any land on which the crops were owned jointly by your tribe or clan? Yes <input type="checkbox"/> No <input type="checkbox"/> b. Any grazing land on which the livestock was owned jointly by the tribe or clan? Yes <input type="checkbox"/> No <input type="checkbox"/> (If "Yes" to both 4a and 4b, Skip to Section III) (If "Yes" in either 4a or 4b) - This questionnaire concerns the holding which you operated or supervised as a chieftain. Do not consider land assigned to individual members of your tribe as part of this holding. (Skip to Section III)				TUBER, ROOT, BULB CROPS Were any of the following tuber, root, or bulb crops harvested FOR FOOD OR FOR LIVESTOCK OR POULTRY FEED - Yes 17. Potatoes, Irish or white - early and late crops for all purposes including seed? 17 <input type="checkbox"/> 18. Manioc (cassava)? 18 <input type="checkbox"/> 19. Sweet potatoes or yams? 19 <input type="checkbox"/> 20. Dry onions? 20 <input type="checkbox"/> 21. Other tuber, root, or bulb crops grown FOR FEED - turnips, sugar beets, etc.? 21 <input type="checkbox"/> (Specify) _____ (If for food, report in 34 or 43) <input type="checkbox"/> None (NO for 17 through 21)															
5. (If operated "as hired manager") This questionnaire concerns the holding you operated as a hired manager, this year, 1971. a. What is your employer's name? _____ (Name of person or agency) b. Is your employer - 1 <input type="checkbox"/> A private person? 4 <input type="checkbox"/> A government agency? 2 <input type="checkbox"/> A corporation? <input type="checkbox"/> Other (Specify) _____ 3 <input type="checkbox"/> A cooperative? c. What is the mailing address of your employer? _____ (Zone) _____ (District) _____ (Hamlet or chiefdom) d. The holding you manage for others includes all land on which you grew crops or kept livestock for your employer. Do not consider public or communal grazing land as part of this holding. Of the land in this holding, did your employer - (1) Own any? Yes <input type="checkbox"/> No <input type="checkbox"/> (2) Rent any FROM others for cash or a share of the production? Yes <input type="checkbox"/> No <input type="checkbox"/> (3) Use any on a squatter basis? Yes <input type="checkbox"/> No <input type="checkbox"/> (4) Use any on some other basis? Yes <input type="checkbox"/> No <input type="checkbox"/> (Specify) _____				CROPS FOR INDUSTRIAL USE Were any of the following temporary crops harvested mainly for INDUSTRIAL USE - Yes 22. Sugarcane cut for sugar or syrup or for sale to mills? 22 <input type="checkbox"/> 23. Sugarcane cut for other purposes except for feed or thatching? 23 <input type="checkbox"/> 24. Cotton? 24 <input type="checkbox"/> 25. Groundnuts (peanuts)? 25 <input type="checkbox"/> 26. Tobacco? 26 <input type="checkbox"/> 27. Soybeans? 27 <input type="checkbox"/> 28. Other temporary crops mainly for industrial use - castor beans, sesame, etc.? 28 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 22 through 28)															
				FOODER CROPS Were any of the following fodder crops harvested from land in crop rotation - Yes 29. Legumes, grasses or cereals cut for hay? 29 <input type="checkbox"/> 30. Legumes, grasses or cereals cut for green feed or silage? 30 <input type="checkbox"/> 31. Other fodder crops - pumpkin, sunflower, cabbage, sugarcane for feed, etc.? 31 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 29 through 31)															
				FIELD SEEDS Were any of the following field seed crops harvested - Yes 32. Alfalfa seed? 32 <input type="checkbox"/> 33. Other field seed crops - lespedeza, orchardgrass, white clover, etc.? 33 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 32 and 33)															

**Exhibit III-2-3. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY),
FORM A-1b--Continued**

Section II - TEMPORARY CROPS HARVESTED THIS YEAR, 1971--Continued	Section III - PERMANENT CROPS--Continued																																							
<p>VEGETABLES AND MELONS FOR HOME USE</p> <p>34. Were any vegetables or melons grown mainly for USE OF THE HOUSEHOLDS ON THIS HOLDING - including vegetables and melons from kitchen or home gardens? 34 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 34)</p> <p>VEGETABLES AND MELONS FOR SALE</p> <p>Were any of the following vegetables or melons grown mainly for SALE FOR HUMAN CONSUMPTION - Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>35. Cabbage? 35 <input type="checkbox"/></p> <p>36. Watermelons? 36 <input type="checkbox"/></p> <p>37. Cantaloupes and other melons? 37 <input type="checkbox"/></p> <p>38. Tomatoes? 38 <input type="checkbox"/></p> <p>39. Beans--harvested green? 39 <input type="checkbox"/></p> <p>40. Peas--harvested green? 40 <input type="checkbox"/></p> <p>41. Maize or sweetcorn--harvested green? 41 <input type="checkbox"/></p> <p>43. Other vegetables mainly for sale? 43 <input type="checkbox"/></p> <p>(Specify) _____</p> <p><input type="checkbox"/> None (NO for 35 through 43)</p> <p>FLOWERS, BULBS, PLANTS</p> <p>44. Were any flowers, flower bulbs, corms, or ornamental plants grown for sale, seed, or industrial use? 44 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 44)</p> <p>(Specify general class) _____</p> <p>OTHER TEMPORARY CROPS</p> <p>45. Were any other temporary crops harvested - that is, crops generally planted each year or grown in rotation? 45 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 45)</p> <p>(Specify) _____</p>	<p>CULTIVATED SMALL FRUITS AND BERRIES</p> <p>66. Were any cultivated strawberries, raspberries, blueberries, or other small fruits or berries grown on this holding? 66 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 66)</p> <p>(Specify) _____</p> <p>PERMANENT GRASSES</p> <p>67. Were any permanent grasses cut for hay (hay cut from permanent grassland even if pastured or grazed before or after the hay was cut)? 67 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 67)</p> <p>NURSERY TREES, VINES, BUSHES</p> <p>68. Was there a nursery of fruit, nut or other trees, bushes, or permanent (perennial) ornamentals on this holding? 68 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 68)</p> <p>OTHER PERMANENT CROPS</p> <p>69. Were any other permanent (perennial) crops grown on this holding? 69 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 69)</p> <p>(Specify) _____</p>																																							
<p>Section IV - PRODUCTION FOR SPECIFIC CROPS</p> <p>(Refer to items 6, 7, 8, 24, 58, and 63 to determine whether the following crops were grown this year.)</p>																																								
<p>3 <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th rowspan="2">Quantity</th> <th colspan="3">Unit (Mark "X" or specify other)</th> <th rowspan="2">b. How many coffee trees were in compact and scattered plantings last year?</th> </tr> <tr> <th>Metric Tons</th> <th>Quintals</th> <th>Kilograms</th> </tr> </thead> <tbody> <tr> <td>70. Wheat <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>/10</td> <td>1</td> <td>2</td> <td>3</td> <td></td> </tr> <tr> <td>71. Rice <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>/10</td> <td>1</td> <td>2</td> <td>3</td> <td></td> </tr> <tr> <td>72. Cotton <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>/10</td> <td>1</td> <td>2</td> <td>3</td> <td></td> </tr> <tr> <td>73. Coffee <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>/10</td> <td>1</td> <td>2</td> <td>3</td> <td></td> </tr> <tr> <td>74. Sisal <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/></td> <td>/10</td> <td>1</td> <td>2</td> <td>3</td> <td></td> </tr> </tbody> </table> <p><input type="checkbox"/> None (NO for 70 through 74)</p>			Quantity	Unit (Mark "X" or specify other)			b. How many coffee trees were in compact and scattered plantings last year?	Metric Tons	Quintals	Kilograms	70. Wheat <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	/10	1	2	3		71. Rice <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	/10	1	2	3		72. Cotton <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	/10	1	2	3		73. Coffee <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	/10	1	2	3		74. Sisal <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	/10	1	2	3	
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74. Sisal <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	/10	1	2	3																																				
<p>Section V - INTERPLANTED AND SUCCESSION CROPS, THIS YEAR, 1971</p> <p>This next section refers to all temporary and permanent crops you grew this year, 1971.</p>																																								
<p>INTERPLANTED CROPS</p> <p>75. Were any of the crops interplanted (intercropped) this year - that is grown on the same land at the same time? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p> <p>SUCCESSION CROPS</p> <p>76. Were any of the crops harvested in succession on the same land this year? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>																																								
<p>Section VI - IRRIGATION AND FERTILIZATION, THIS YEAR, 1971</p> <p>This next section also refers to all temporary and permanent crops you grew this year, 1971.</p>																																								
<p>77. Were any of the crops irrigated this year? Irrigation refers to supplying land with water other than rainfall. When water is collected and brought to the land later, consider this as irrigation. Also, include purposeful flooding of land by rivers, streams, or dams. 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to 78)</p> <p>a. Which crops were irrigated? _____</p> <p>78. Were any chemical or other commercial fertilizers applied to any cropland this year? Include rock phosphate but do not include lime or gypsum. Also, do not include farmyard manure or crop residue. 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to Section VII)</p> <p>a. Which crops were fertilized? _____</p>																																								
<p>CROPS FOR INDUSTRIAL USE</p> <p>Were any of the following permanent (perennial) crops grown mainly for INDUSTRIAL USE - Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>58. Coffee? 58 <input type="checkbox"/></p> <p>59. Cacao? 59 <input type="checkbox"/></p> <p>60. Tea? 60 <input type="checkbox"/></p> <p>61. Coconut? 61 <input type="checkbox"/></p> <p>62. Olive? 62 <input type="checkbox"/></p> <p>63. Sisal? 63 <input type="checkbox"/></p> <p>64. Rubber? 64 <input type="checkbox"/></p> <p>65. Other permanent (perennial) crops mainly for industrial use--oil palm, jute, mulberry, etc.? 65 <input type="checkbox"/></p> <p>(Specify) _____</p> <p><input type="checkbox"/> None (NO for 58 through 65)</p>																																								

**Exhibit III-2-3. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY),
FORM A-1b--Continued**

Section VII - LIVESTOCK AND POULTRY	Section VIII - SALE OF AGRICULTURAL PRODUCTS																																																																							
<p>This next section concerns livestock and poultry. Report all livestock and poultry on this holding, whether owned by you, by your landlord, or by someone else. Include livestock kept on communal or public grazing land if owned [by you] [jointly by your tribe or clan] [by your employer]. If livestock is associated with more than one holding, report animals that are kept on this holding during the night.</p>																																																																								
<p>ANIMALS ON HOLDING 6</p> <p>Are there any of the following animals now on this holding or on communal grazing land - a. How many?</p> <p>79. Horses - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>80. Mules - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>81. Asses - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>82. Cattle and calves, including oxen - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Total of (1) and (2) should equal 82)</p> <p style="margin-left: 40px;">(1) Cows and heifers that have calved? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) All other cattle? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>83. Sheep and lambs - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Total of (1) and (2) should equal 83)</p> <p style="margin-left: 40px;">(1) Under 1 year old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) 1 year or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>84. Goats and kids - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Total of (1) and (2) should equal 84)</p> <p style="margin-left: 40px;">(1) Under 1 year old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) 1 year or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>85. Hogs and pigs - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Total of (1) and (2) should equal 85)</p> <p style="margin-left: 40px;">(1) Under 6 months old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) 6 months or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>86. Other domestic animals or animals in captivity now on this holding - camels, buffaloes, llamas, rabbits, etc. - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 79 through 86. If NONE, skip to 93.)</p>																																																																								
<p>ANIMALS MILKED 5</p> <p>Were any of the following animals milked yesterday - a. How many?</p> <p>87. Cows (cattle)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>88. Goats? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>89. Other animals - sheep, camels, buffaloes, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 87 through 89)</p>																																																																								
<p>ANIMALS FOR TRANSPORT OR DRAFT PURPOSES</p> <p>Were any of the following animals now on this holding used for transport or draft purposes at any time this year - that is, for carrying loads, pulling or drawing loads, plowing, thrashing, grinding, lifting water, etc. - a. How many?</p> <p>90. Cattle, including oxen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>91. Buffaloes? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>92. Other animals - camels, elephants, llamas, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 90 through 92)</p>																																																																								
<p>POULTRY ON HOLDING</p> <p>Are any of the following kinds of poultry now on this holding - a. How many?</p> <p>93. Chickens - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Total of (1) and (2) should equal 93)</p> <p style="margin-left: 40px;">(1) Baby chicks and other chickens under 4 months old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) All chickens 4 months or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>94. Other poultry - turkeys, ducks, geese, etc. - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 93 and 94)</p>																																																																								
<p>This next section refers to the sale of agricultural products of this holding during 1971. Agricultural products include crops, livestock, livestock products, poultry, poultry products, forest products, fish, etc.</p> <p>95. Did the total cash received during 1971 from the sale of agricultural products of this holding amount to -</p> <p>1 <input type="checkbox"/> \$100 or more?</p> <p>2 <input type="checkbox"/> \$25 to \$99?</p> <p>3 <input type="checkbox"/> Less than \$25? (Skip to Section IX)</p> <p>a. Did half or more of the cash received from the sale of agricultural products come from the sale of -</p> <p>(1) Crops? <input type="checkbox"/> Yes (Skip to Section IX) <input type="checkbox"/> No</p> <p>(2) Livestock and poultry - including livestock products and poultry products? <input type="checkbox"/> Yes (Skip to Section IX) <input type="checkbox"/> No</p> <p>(3) Other agricultural products? <input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to Section IX)</p> <p>b. What were the other agricultural products?</p> <p>_____</p> <p>_____</p>																																																																								
<p style="text-align: center;">Section IX - AGRICULTURAL POWER, EQUIPMENT, AND TRANSPORT FACILITIES</p> <p>These next questions are about power, equipment, and transport facilities.</p> <p>96. This year, was there electric current for use - Yes No</p> <p>a. In the dwelling? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>b. Elsewhere on the holding? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>97. Was the agricultural work in the fields or elsewhere on this holding done - Yes No</p> <p>a. In part by animal power? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>b. In part by mechanical power - that is, by machines propelled or operated by petrol, oil, gas, steam, water, wind, electricity? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>(If NO in both 97a and 97b, skip to 99)</p> <p>98. This year, was any of the following equipment used for agricultural work on this holding - Yes No</p> <p>a. Animal-drawn plows? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>b. Tractor-operated plows? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>c. Tractors? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>d. Thrashers (engine-operated)? <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>99. How many of the following vehicles are now kept on this holding - None Number</p> <p>a. Jeeps, station wagons, motor trucks? <input type="checkbox"/> _____</p> <p>b. Automobiles? <input type="checkbox"/> _____</p> <p>c. Animal-drawn carts or wagons? <input type="checkbox"/> _____</p>																																																																								
<p style="text-align: center;">Section X - CHARACTERISTICS OF HOLDER'S HOUSEHOLD</p> <p>100. These next questions relate to the people who live in your housing unit. What are the names, relationship, and ages of all the persons who live in your housing unit? Include infants, hired workers, and other persons who usually live with you. (List holder on the first line.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Line No.</th> <th style="width: 40%;">a. Name</th> <th style="width: 20%;">b. Relationship to holder</th> <th style="width: 10%;">c. Sex (M or F)</th> <th style="width: 25%;">d. Age as of last birthday</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td>HOLDER</td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 15%;">FOR OFFICE USE</td> <td style="width: 35%;">Total persons</td> <td style="width: 15%;">Total</td> <td style="width: 15%;">15 or over</td> <td style="width: 20%;">Male</td> <td style="width: 20%;">Female</td> </tr> </table>		Line No.	a. Name	b. Relationship to holder	c. Sex (M or F)	d. Age as of last birthday	1		HOLDER			2					3					4					5					6					7					8					9					10					11					12					FOR OFFICE USE	Total persons	Total	15 or over	Male	Female
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FOR OFFICE USE	Total persons	Total	15 or over	Male	Female																																																																			

**Exhibit III-2-3. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY),
FORM A-1b--Continued**

Section XI - MEASUREMENT OF CROP AREA										Section XII - ENUMERATOR'S RECORD		
101. Area measurement sample 1 <input type="checkbox"/> Holding in sample for area measurement (circled A-1b number in column 14 or 15 of A-2b Listing Book) 2 <input type="checkbox"/> Holding not in sample for area measurement (A-1b number NOT circled in column 14 or 15 of A-2b Listing Book. Skip to Section XIII.)										RECORD OF VISITS		
										Visit	Date	Notes
										First		
										Second		
										Third		
										Fourth		
										Name		
										Principal respondent	1 <input type="checkbox"/> Holder <input type="checkbox"/> Other (Specify) _____ 2 <input type="checkbox"/> Wife _____	
										Noninterview (Explain)		
										Date completed		Enumerator's signature
LAND AREA IN CROPS (Refer to Sections II and III and determine whether any of the following crops were grown this year, 1971.)										FOR OFFICE USE		
										Area		
102. Wheat										Yes	No	
103. Rice										<input type="checkbox"/>	<input type="checkbox"/>	
104. Cotton										<input type="checkbox"/>	<input type="checkbox"/>	
105. Coffee										<input type="checkbox"/>	<input type="checkbox"/>	
106. Sisal										<input type="checkbox"/>	<input type="checkbox"/>	
107. Other crops										<input type="checkbox"/>	<input type="checkbox"/>	
TOTAL →												
(If NO for 102 through 107, skip to Section XIII.)										Number of separate plots		
Now, I want you to show me all the land on which you grew crops this year. We will start with the field or tract which is closest to here and measure all separate fields or tracts on which crops were grown. We will also measure the specific area(s) on which wheat rice cotton coffee sisal was (were) grown. (Make sketch below; then go to Section XIII.)												
<div style="display: flex;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">SCALE: 1 side of each small square equals 20 meters</div> <div style="flex-grow: 1; border: 1px solid black; background-image: linear-gradient(to right, black 1px, transparent 1px), linear-gradient(to bottom, black 1px, transparent 1px); background-size: 20px 20px;"></div> </div>												
SPECIAL CASES Respondent definitely knows how much land was in each crop and has 10 or more hectares of cropland.										NOTES		
Unit of measure <input type="checkbox"/> Hectare <input type="checkbox"/> Tanbo <input type="checkbox"/> Manzana <input type="checkbox"/> Other (Specify) _____												
Tract, field, or plot No.	Wheat	Rice	Cotton	Coffee	Sisal	Other crops	TOTAL					
	/10	/10	/10	/10	/10	/10	/10					
	/10	/10	/10	/10	/10	/10	/10					
	/10	/10	/10	/10	/10	/10	/10					
TOTAL	/10	/10	/10	/10	/10	/10	/10					
(Verify with respondent that this was the approximate total of land in crops. If not, review figures and correct accordingly. Go to Section XIII.)												

Exhibit III-2-4. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY-NATIONAL CERTAINTY), FORM A-1d

Form A-1d (AGROSTAN) (March 1971)		MINISTRY OF ECONOMY NATIONAL STATISTICAL OFFICE	
1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (Northern Territory - National Certainty Holding)		IDENTIFICATION	
A. Name of holder _____		B. Listing Book (A-2d) _____ Page _____ Line _____	
D. Zone _____ Code _____		E. District _____ Code _____	
F. PSU No. _____		C. Preliminary A-1d No. _____	
G. Final A-1d No. _____		H. Sampling weight _____	
ENUMERATOR: If the respondent is someone other than the holder, be sure he understands that the terms "you" and "your" refer to the holder.			
Section I - METHOD OF OPERATION AND TENURE		Section II - TEMPORARY CROPS HARVESTED THIS YEAR, 1971	
1. Method of operation 1 <input type="checkbox"/> On own account 2 <input type="checkbox"/> In partnership (Skip to 3) 3 <input type="checkbox"/> As chieftain (Skip to 4) 4 <input type="checkbox"/> As hired manager (Skip to 5)		This section concerns all temporary crops harvested this year, 1971. These are crops generally planted each year or grown in rotation. Report crops for this holding only. CEREALS FOR GRAIN	
2. (If operated "on own account") This questionnaire concerns the holding you operated on your own account. Include all land on which you grew crops or kept livestock at any time this year, 1971. Do not consider public or communal grazing land as part of this holding. Of the land in this holding, was any - (1) Assigned to you by your tribe or clan? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (2) Owned by you? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (3) Rented FROM others for cash or a share of the production? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (4) Used on a squatter basis? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (5) Used on some other basis? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (Specify) _____ (Skip to Section II)		Were any of the following cereals harvested for GRAIN - Yes 6. Wheat? 6 <input type="checkbox"/> 7. Rice - paddy (irrigated)? 7 <input type="checkbox"/> 8. Rice - upland? 8 <input type="checkbox"/> 9. Sorghum? 9 <input type="checkbox"/> 10. Maize (corn)? 10 <input type="checkbox"/> 11. Barley? 11 <input type="checkbox"/> 13. Other cereals for grain - millet, oats, rye, etc.? 13 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 6 through 13)	
3. (If operated "in partnership") This questionnaire concerns the holding you operated in partnership with others at any time this year, 1971. a. Who is the principal partner? (If partners are of equal rank, consider the older (oldest) as the principal partner.) <input type="checkbox"/> Holder named in item A of the Identification Section (Skip to 3c) <input type="checkbox"/> Other person - Name _____ (Surname) _____ (Given name) b. Name of other person <input type="checkbox"/> Appears in Listing Book - Page _____, Line _____ (Skip to Section III) <input type="checkbox"/> Does not appear in Listing Book c. Include all land on which you and your partner(s) grew crops or kept livestock at any time this year. Do not consider public or communal grazing land as part of the holding. Of the land in this holding, was any - (1) Assigned to you by your tribe or clan? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (2) Owned by you? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (3) Rented FROM others for cash or a share of the production? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (4) Used on a squatter basis? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (5) Used on some other basis? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (Specify) _____ (Skip to Section II)		LEGUMES FOR GRAIN Were any of the following legumes harvested mainly for GRAIN - Yes 14. Edible dry beans - excluding broad beans (see 16) and soybeans (see 27)? 14 <input type="checkbox"/> 15. Edible dry peas - excluding chick peas, cowpeas, and pigeon peas (see 16)? 15 <input type="checkbox"/> 16. Other legumes for grain - broad beans, chick peas, cowpeas, pigeon peas, lentils, etc.? 16 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 14 through 16)	
4. (If operated "as chieftain") At any time this year, 1971, did you operate or supervise - a. Any land on which the crops were owned jointly by your tribe or clan? 1 <input type="checkbox"/> 2 <input type="checkbox"/> b. Any grazing land on which the livestock was owned jointly by the tribe or clan? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (If "No" to both 4a and 4b, Skip to Section III) (If "Yes" in either 4a or 4b) - This questionnaire concerns the holding which you operated or supervised as a chieftain. Do not consider land assigned to individual members of your tribe as part of this holding. (Skip to Section II)		TUBER, ROOT, BULB CROPS Were any of the following tuber, root, or bulb crops harvested FOR FOOD OR FOR LIVESTOCK OR POULTRY FEED - Yes 17. Potatoes, Irish or white - early and late crops for all purposes including seed? 17 <input type="checkbox"/> 18. Manioc (cassava)? 18 <input type="checkbox"/> 19. Sweet potatoes or yams? 19 <input type="checkbox"/> 20. Dry onions? 20 <input type="checkbox"/> 21. Other tuber, root, or bulb crops grown FOR FEED - turnips, sugar beets, etc.? 21 <input type="checkbox"/> (Specify) _____ (If for food, report in 34 or 43) <input type="checkbox"/> None (NO for 17 through 21)	
5. (If operated "as hired manager") This questionnaire concerns the holding you operated as a hired manager, this year, 1971. a. What is your employer's name? _____ (Name of person or agency) b. Is your employer - 1 <input type="checkbox"/> A private person? 4 <input type="checkbox"/> A government agency? 2 <input type="checkbox"/> A corporation? <input type="checkbox"/> Other (Specify) _____ 3 <input type="checkbox"/> A cooperative? c. What is the mailing address of your employer? _____ (Zone) _____ (District) _____ (Hamlet or chiefdom) d. The holding you manage for others includes all land on which you grew crops or kept livestock for your employer. Do not consider public or communal grazing land as part of this holding. Of the land in this holding, did your employer - (1) Own any? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (2) Rent any FROM others for cash or a share of the production? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (3) Use any on a squatter basis? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (4) Use any on some other basis? 1 <input type="checkbox"/> 2 <input type="checkbox"/> (Specify) _____		CROPS FOR INDUSTRIAL USE Were any of the following temporary crops harvested mainly for INDUSTRIAL USE - Yes 22. Sugarcane cut for sugar or syrup or for sale to mills? 22 <input type="checkbox"/> 23. Sugarcane cut for other purposes except for feed or thatching? 23 <input type="checkbox"/> 24. Cotton? 24 <input type="checkbox"/> 25. Groundnuts (peanuts)? 25 <input type="checkbox"/> 26. Tobacco? 26 <input type="checkbox"/> 27. Soybeans? 27 <input type="checkbox"/> 28. Other temporary crops mainly for industrial use - castor beans, sesame, etc.? 28 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 22 through 28)	
FOODER CROPS Were any of the following fodder crops harvested from land in crop rotation - Yes 29. Legumes, grasses or cereals cut for hay? 29 <input type="checkbox"/> 30. Legumes, grasses or cereals cut for green feed or silage? 30 <input type="checkbox"/> 31. Other fodder crops - pumpkin, sunflower, cabbage, sugarcane for feed, etc.? 31 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 29 through 31)		FIELD SEEDS Were any of the following field seed crops harvested - Yes 32. Alfalfa seed? 32 <input type="checkbox"/> 33. Other field seed crops - lespedeza, orchardgrass, white clover, etc.? 33 <input type="checkbox"/> (Specify) _____ <input type="checkbox"/> None (NO for 32 and 33)	

Exhibit III-2-4. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY-NATIONAL CERTAINTY), FORM A-1d--Continued

Section II - TEMPORARY CROPS HARVESTED THIS YEAR, 1971--Continued	Section III - PERMANENT CROPS--Continued																																		
<p>VEGETABLES AND MELONS FOR HOME USE</p> <p>34. Were any vegetables or melons grown mainly for USE OF THE HOUSEHOLDS ON THIS HOLDING - including vegetables and melons from kitchen or home gardens? 34 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 34)</p> <p>VEGETABLES AND MELONS FOR SALE</p> <p>Were any of the following vegetables or melons grown mainly for SALE FOR HUMAN CONSUMPTION - Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>35. Cabbage? 35 <input type="checkbox"/></p> <p>36. Watermelons? 36 <input type="checkbox"/></p> <p>37. Cantaloupes and other melons? 37 <input type="checkbox"/></p> <p>38. Tomatoes? 38 <input type="checkbox"/></p> <p>39. Beans--harvested green? 39 <input type="checkbox"/></p> <p>40. Peas--harvested green? 40 <input type="checkbox"/></p> <p>41. Maize or sweetcorn--harvested green? 41 <input type="checkbox"/></p> <p>43. Other vegetables mainly for sale? 43 <input type="checkbox"/></p> <p>(Specify) _____</p> <p><input type="checkbox"/> None (NO for 35 through 43)</p> <p>FLOWERS, BULBS, PLANTS</p> <p>44. Were any flowers, flower bulbs, corms, or ornamental plants grown for sale, seed, or industrial use? 44 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 44)</p> <p>(Specify general class) _____</p> <p><input type="checkbox"/> None (NO for 44)</p> <p>OTHER TEMPORARY CROPS</p> <p>45. Were any other temporary crops harvested - that is, crops generally planted each year or grown in rotation? 45 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 45)</p> <p>(Specify) _____</p>	<p>CULTIVATED SMALL FRUITS AND BERRIES</p> <p>66. Were any cultivated strawberries, raspberries, blueberries, or other small fruits or berries grown on this holding? 66 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 66)</p> <p>(Specify) _____</p> <p>PERMANENT GRASSES</p> <p>67. Were any permanent grasses cut for hay (hay cut from permanent grassland even if pastured or grazed before or after the hay was cut)? 67 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 67)</p> <p>NURSERY TREES, VINES, BUSHES</p> <p>68. Was there a nursery of fruit, nut or other trees, bushes, or permanent (perennial) ornamentals on this holding? 68 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 68)</p> <p>OTHER PERMANENT CROPS</p> <p>69. Were any other permanent (perennial) crops grown on this holding? 69 <input type="checkbox"/> Yes <input type="checkbox"/> None (NO for 69)</p> <p>(Specify) _____</p>																																		
<p>Section IV - PRODUCTION FOR SPECIFIC CROPS</p> <p>(Refer to items 6, 7, 8, 24, 58, and 63 to determine whether the following crops were grown this year.)</p>																																			
<p>3. a. What was the total production of [wheat] [rice] [cotton] [coffee] [sisal] this year, 1971? If any crop was shared, report total - not just your share. (Report rice production in rough, cotton production in "lint and seed.")</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Quantity</th> <th colspan="4">Unit (Mark "X" or specify other)</th> </tr> <tr> <th>Metric tons</th> <th>Quintals</th> <th>Kilograms</th> <th>Other (Specify)</th> </tr> </thead> <tbody> <tr> <td>70. Wheat <input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td>/10</td> <td>1 2 3</td> <td></td> <td></td> </tr> <tr> <td>71. Rice <input type="checkbox"/></td> <td>/10</td> <td>1 2 3</td> <td></td> <td></td> </tr> <tr> <td>72. Cotton <input type="checkbox"/></td> <td>/10</td> <td>1 2 3</td> <td></td> <td></td> </tr> <tr> <td>73. Coffee <input type="checkbox"/></td> <td>/10</td> <td>1 2 3</td> <td></td> <td></td> </tr> <tr> <td>74. Sisal <input type="checkbox"/></td> <td>/10</td> <td>1 2 3</td> <td></td> <td></td> </tr> </tbody> </table> <p><input type="checkbox"/> None (NO for 70 through 74)</p>		Quantity	Unit (Mark "X" or specify other)				Metric tons	Quintals	Kilograms	Other (Specify)	70. Wheat <input type="checkbox"/> Yes <input type="checkbox"/> No	/10	1 2 3			71. Rice <input type="checkbox"/>	/10	1 2 3			72. Cotton <input type="checkbox"/>	/10	1 2 3			73. Coffee <input type="checkbox"/>	/10	1 2 3			74. Sisal <input type="checkbox"/>	/10	1 2 3		
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73. Coffee <input type="checkbox"/>	/10	1 2 3																																	
74. Sisal <input type="checkbox"/>	/10	1 2 3																																	
<p>b. How many coffee trees were in compact and scattered plantings last year?</p>																																			
<p>Section V - INTERPLANTED AND SUCCESSION CROPS, THIS YEAR, 1971</p> <p>This next section refers to all temporary and permanent crops you grew this year, 1971.</p>																																			
<p>INTERPLANTED CROPS</p> <p>75. Were any of the crops interplanted (intercropped) this year - that is grown on the same land at the same time?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>																																			
<p>SUCCESSION CROPS</p> <p>76. Were any of the crops harvested in succession on the same land this year?</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>																																			
<p>Section VI - IRRIGATION AND FERTILIZATION, THIS YEAR, 1971</p> <p>This next section also refers to all temporary and permanent crops you grew this year, 1971.</p>																																			
<p>77. Were any of the crops irrigated this year? Irrigation refers to supplying land with water other than rainfall. When water is collected and brought to the land later, consider this as irrigation. Also, include purposeful flooding of land by rivers, streams, or dams.</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to 78)</p> <p>a. Which crops were irrigated?</p> <p>_____</p>																																			
<p>78. Were any chemical or other commercial fertilizers applied to any cropland this year? Include rock phosphate but do not include lime or gypsum. Also, do not include farmyard manure or crop residue.</p> <p>1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to Section VII)</p> <p>a. Which crops were fertilized?</p> <p>_____</p>																																			

Exhibit III-2-4. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY-NATIONAL CERTAINTY), FORM A-1d--Continued

Section VII - LIVESTOCK AND POULTRY	Section VIII - SALE OF AGRICULTURAL PRODUCTS																																																																														
<p>This next section concerns livestock and poultry. Report all livestock and poultry on this holding, whether owned by you, by your landlord, or by someone else. Include livestock kept on communal or public grazing land if owned [by you] [jointly by your tribe or clan] [by your employer]. If livestock is associated with more than one holding, report animals that are kept on this holding during the night.</p> <p>ANIMALS ON HOLDING</p> <p>Are there any of the following animals now on this holding or on communal grazing land -</p> <p>79. Horses - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>80. Mules - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>81. Asses - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>82. Cattle and calves, including oxen - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Total of (1) and (2) should equal 82)</p> <p style="margin-left: 40px;">(1) Cows and heifers that have calved? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) All other cattle? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>83. Sheep and lambs - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Total of (1) and (2) should equal 83)</p> <p style="margin-left: 40px;">(1) Under 1 year old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) 1 year or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>84. Goats and kids - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Total of (1) and (2) should equal 84)</p> <p style="margin-left: 40px;">(1) Under 1 year old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) 1 year or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>85. Hogs and pigs - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Total of (1) and (2) should equal 85)</p> <p style="margin-left: 40px;">(1) Under 6 months old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) 6 months or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>86. Other domestic animals or animals in captivity now on this holding - camels, buffaloes, llamas, rabbits, etc. - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 79 through 86. If NONE, skip to 93.)</p>	<p>This next section refers to the sale of agricultural products of this holding during 1971. Agricultural products include crops, livestock, livestock products, poultry, poultry products, forest products, fish, etc.</p> <p>95. Did the total cash received during 1971 from the sale of agricultural products of this holding amount to -</p> <p>1 <input type="checkbox"/> \$100 or more?</p> <p>2 <input type="checkbox"/> \$25 to \$99?</p> <p>3 <input type="checkbox"/> Less than \$25? (Skip to Section IX)</p> <p>a. Did half or more of the cash received from the sale of agricultural products come from the sale of -</p> <p>(1) Crops? <input type="checkbox"/> Yes (Skip to Section IX) <input type="checkbox"/> No</p> <p>(2) Livestock and poultry - including livestock products and poultry products? <input type="checkbox"/> Yes (Skip to Section IX) <input type="checkbox"/> No</p> <p>(3) Other agricultural products? <input type="checkbox"/> Yes <input type="checkbox"/> No (Skip to Section IX)</p> <p>b. What were the other agricultural products?</p> <p>_____</p>																																																																														
<p>ANIMALS MILKED</p> <p>Were any of the following animals milked yesterday -</p> <p>87. Cows (cattle)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>88. Goats? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>89. Other animals - sheep, camels, buffaloes, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 87 through 89)</p>	<p style="text-align: center;">Section IX - AGRICULTURAL POWER, EQUIPMENT, AND TRANSPORT FACILITIES</p> <p>These next questions are about power, equipment, and transport facilities.</p> <p>96. This year, was there electric current for use -</p> <p>a. In the dwelling? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. Elsewhere on the holding? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>97. Was the agricultural work in the fields or elsewhere on this holding done -</p> <p>a. In part by animal power? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. In part by mechanical power - that is, by machines propelled or operated by petrol, oil, gas, steam, water, wind, electricity? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>(If NO in both 97a and 97b, skip to 99)</p>																																																																														
<p>ANIMALS FOR TRANSPORT OR DRAFT PURPOSES</p> <p>Were any of the following animals now on this holding used for transport or draft purposes at any time this year - that is, for carrying loads, pulling or drawing loads, plowing, threshing, grinding, lifting water, etc. -</p> <p>90. Cattle, including oxen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>91. Buffaloes? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>92. Other animals - camels, elephants, llamas, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 90 through 92)</p>	<p>98. This year, was any of the following equipment used for agricultural work on this holding -</p> <p>a. Animal-drawn plows? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. Tractor-operated plows? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>c. Tractors? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>d. Thrashers (engine-operated)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>99. How many of the following vehicles are now kept on this holding -</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>None</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>a. Jeeps, station wagons, motor trucks? <input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>b. Automobiles? <input type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>c. Animal-drawn carts or wagons? <input type="checkbox"/></td> <td></td> <td></td> </tr> </tbody> </table>		None	Number	a. Jeeps, station wagons, motor trucks? <input type="checkbox"/>			b. Automobiles? <input type="checkbox"/>			c. Animal-drawn carts or wagons? <input type="checkbox"/>																																																																				
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b. Automobiles? <input type="checkbox"/>																																																																															
c. Animal-drawn carts or wagons? <input type="checkbox"/>																																																																															
<p>POULTRY ON HOLDING</p> <p>Are any of the following kinds of poultry now on this holding -</p> <p>93. Chickens - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Total of (1) and (2) should equal 93)</p> <p style="margin-left: 40px;">(1) Baby chicks and other chickens under 4 months old? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 40px;">(2) All chickens 4 months or older? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>94. Other poultry - turkeys, ducks, geese, etc. - all ages? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">(Specify) _____</p> <p><input type="checkbox"/> None (NO for 93 and 94)</p>	<p style="text-align: center;">Section X - CHARACTERISTICS OF HOLDER'S HOUSEHOLD</p> <p>100. These next questions relate to the people who live in your housing unit. What are the names, relationship, and ages of all the persons who live in your housing unit? Include infants, hired workers, and other persons who usually live with you. (List holder on the first line.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Line No.</th> <th>a. Name</th> <th>b. Relationship to holder</th> <th>c. Sex (M or F)</th> <th>d. Age as of last birthday</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td>HOLDER</td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">FOR OFFICE USE</th> <th rowspan="2">Total persons</th> <th colspan="3">15 or over</th> </tr> <tr> <th>Total</th> <th>Male</th> <th>Female</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Line No.	a. Name	b. Relationship to holder	c. Sex (M or F)	d. Age as of last birthday	1		HOLDER			2					3					4					5					6					7					8					9					10					11					12					FOR OFFICE USE	Total persons	15 or over			Total	Male	Female					
Line No.	a. Name	b. Relationship to holder	c. Sex (M or F)	d. Age as of last birthday																																																																											
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		Total	Male	Female																																																																											

Exhibit III-2-4. 1971 CENSUS OF AGRICULTURE QUESTIONNAIRE (NORTHERN TERRITORY-NATIONAL CERTAINTY), FORM A-1d--Continued

Section XI - MEASUREMENT OF CROP AREA				Section XII - ENUMERATOR'S RECORD		
101. Unit of land measure for this holding <input type="checkbox"/> Hectare <input type="checkbox"/> Tanbo <input type="checkbox"/> Manzana				RECORD OF VISITS		
				Visit	Date	Notes
LAND AREA IN CROPS <i>(Refer to Sections II and III and determine whether any of the following crops were grown this year, 1971.)</i>				First		
				Second		
				Third		
				Fourth		
a. How much land was used to grow <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <div style="display: flex; align-items: center;"> <div style="width: 20px; text-align: center;">Yes</div> <div> [wheat] [rice] [cotton] [coffee] [sisal] [other crops] this year, 1971? (Be sure to report crop area in the unit of measure checked in 101.) </div> </div> <div style="width: 30px; text-align: center;">Area</div> <div style="width: 10px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">FOR OFFICE USE</div> </div> <div style="width: 30px; text-align: center;">FOR OFFICE USE</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> 102. Wheat <input type="checkbox"/> 103. Rice <input type="checkbox"/> 104. Cotton <input type="checkbox"/> 105. Coffee <input type="checkbox"/> 106. Sisal <input type="checkbox"/> 107. Other crops <input type="checkbox"/> </div> <div style="width: 30px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">/10</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> TOTAL → </div> <div style="width: 30px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">/10</div> <div style="width: 10px; text-align: center;">/10</div> </div>				Principal respondent Name _____ 1 <input type="checkbox"/> Holder <input type="checkbox"/> Other (Specify) _____ 2 <input type="checkbox"/> Wife		
(Verify with the respondent that the total was the approximate total of land in crops; if not, review figures and correct accordingly. Go to Section XII.) <input type="checkbox"/> None (NO for 102 through 107. Go to Section XII.)				<input type="checkbox"/> Noninterview (Explain) _____		
				Date completed		Enumerator's signature
NOTES						

Exhibit IV-2-6. ESTIMATED SAMPLE SIZE, FOR THE PROVINCES

Province	Population, 1 May 1970 (preliminary count)				PSU's		Housing units (estimated number)	
	Total for agriculture census	Rural	Small urban places	Outskirts of large urban places	Total	In sample	Total	Listings in sample PSU's
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Provinces, total.....	6,747,729	6,090,387	413,340	244,002	11,948	2,991	1,204,210	301,055
Bolivar.....	135,477	104,994	27,745	2,738	248	62	19,640	4,910
Dewar.....	313,778	277,015	28,960	7,803	542	136	46,840	11,710
DuBois.....	541,432	477,251	42,475	21,706	916	229	94,305	23,575
Hassam.....	286,346	245,867	23,453	17,026	531	133	41,500	10,375
Liberto.....	691,781	639,981	31,745	20,055	1,231	308	135,225	33,805
Lopez.....	1,381,114	1,243,892	61,714	75,508	2,345	586	276,225	69,055
Lo-San-Tho.....	258,317	240,086	5,398	12,833	498	125	39,630	9,910
Morgan.....	528,833	492,982	14,558	21,293	951	238	99,720	24,930
Paris.....	286,014	255,112	29,160	1,742	546	137	42,145	10,535
Rajpur.....	563,123	520,087	31,772	11,264	1,048	264	89,385	22,350
Rama.....	362,480	309,907	41,901	10,672	670	168	55,030	13,760
Tali.....	1,115,901	1,026,749	59,058	30,094	1,889	472	224,115	56,030
Valencia.....	283,133	256,464	15,401	11,268	533	133	40,450	10,110
All holdings within scope of agriculture census (estimated number)					Holdings in sample (estimated number)			
	Total	Small	Local Certainty	National Certainty	Total	Small	Local Certainty	National Certainty
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Provinces, total.....	1,008,970	977,490	27,880	3,600	71,680	61,100	6,980	3,600
Bolivar.....	17,855	16,780	955	120	1,410	1,050	240	120
Dewar.....	40,730	38,510	2,160	60	3,010	2,410	540	60
DuBois.....	78,585	76,240	1,965	380	5,635	4,765	490	380
Hassam.....	34,645	33,005	1,400	240	2,650	2,060	350	240
Liberto.....	110,615	108,850	1,600	165	7,360	6,795	400	165
Lopez.....	226,860	223,600	2,240	1,020	15,560	13,930	560	1,020
Lo-San-Tho.....	36,530	33,585	2,725	220	3,005	2,105	680	220
Morgan.....	83,100	80,465	2,475	160	5,810	5,030	620	160
Paris.....	38,815	36,935	1,680	200	2,940	2,320	420	200
Rajpur.....	77,855	73,935	3,520	400	5,905	4,620	885	400
Rama.....	47,990	45,930	1,960	100	3,460	2,870	490	100
Tali.....	180,890	176,935	3,595	360	12,315	11,050	905	360
Valencia.....	34,500	32,720	1,605	175	2,620	2,045	400	175

Column 1. Sum of columns 2, 3, and 4.

Column 2. All EA's classified as rural.

Column 3. Urban places under 5,000 population.

Column 4. EA's outside the built-up area of urban places with population of 5,000 and over. Delineation of such EA's is based on judgment and knowledge of the area.

Column 5. Primary sampling units established for the 1971 Sample Census of Agriculture; roughly equivalent to EA's in the Population Census except that small EA's are combined and large EA's are subdivided.

Column 6. One-fourth of the total PSU's.

Column 7. Estimates based on the 1960 average number of persons per housing unit; by Province, this average ranges from approximately 5.0 to 7.0 persons.

Column 8. One-fourth of the total housing units that are in the sample PSU's.

Column 9. Estimates of holdings in 1971 assume the same relationship between listings and holdings that was found in the 1961

Sample Census of Agriculture, with adjustment for difference in size of holdings considered out-of-scope. By Province, this relationship ranges from about 80 percent to 92 percent.

Column 10. Holdings between 1/10 hectare and Local Certainty level.

Column 11. Holdings 50 to 499 hectares in Liberto, Lopez, Morgan, and Tali Provinces; 100 to 499 hectares in Bolivar, DuBois, Hassam, Lo-San-Tho, and Paris Provinces; and 200 to 499 hectares in Dewar, Rajpur, Rama, and Valencia Provinces.

Column 12. Holdings of 500 hectares or more or having specialized agricultural operations.

Column 13. Sum of columns 14, 15, and 16; total number of A-1 questionnaires to be filled.

Column 14. One-sixteenth of the estimate in column 10 (one-fourth of the small holdings within the sample PSU's).

Column 15. One-fourth of the estimate in column 11 (all the Local Certainty holdings in the sample PSU's).

Column 16. Same as figure in column 12; all National Certainty holdings are to be enumerated.

Exhibit IV-2-7. ESTIMATED SAMPLE SIZE, FOR RAJPUR PROVINCE

District	Population, 1 May 1970 (preliminary counts)				PSU'S		Housing units (estimated number)	
	Total for agriculture census	Rural	Small urban places	Outskirts of large urban places	Total	In sample	Total	Listings in sample PSU's
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total.....	563,123	520,087	31,772	11,264	1,048	264	89,385	22,350
Adoni-Bellary.....	48,780	46,157	-	2,623	87	22	7,740	1,935
Ajmer.....	54,766	47,445	2,471	4,850	96	24	8,695	2,170
Baroda.....	46,618	41,476	3,789	1,353	88	22	7,400	1,850
Bhopal.....	32,128	30,123	2,005	-	69	17	5,100	1,275
Chanda.....	47,749	44,935	2,814	-	86	22	7,580	1,895
Chirmuri.....	53,002	49,689	3,313	-	92	23	8,415	2,105
Dabhor-Poona.....	40,414	38,439	1,975	-	78	20	6,415	1,605
Jaipur-Kistna.....	27,741	25,630	2,111	-	60	15	4,405	1,100
Kanpur.....	35,138	31,221	3,917	-	68	17	5,575	1,395
Karur.....	37,872	33,948	3,924	-	73	18	6,010	1,505
Kolar.....	39,963	39,181	782	-	74	19	6,345	1,585
Ranchi.....	45,555	40,884	4,671	-	83	21	7,230	1,810
Warangol.....	53,397	50,959	-	2,438	94	24	8,475	2,120
All holdings within scope of agriculture census (estimated number)					Holdings in sample (estimated number)			
	Total	Small	Local Certainty	National Certainty	Total	Small	Local Certainty	National Certainty
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total.....	77,855	73,935	3,520	400	5,905	4,620	885	400
Adoni-Bellary.....	6,745	6,205	480	60	570	390	120	60
Ajmer.....	7,570	7,270	290	10	540	460	70	10
Baroda.....	6,445	6,070	340	35	500	380	85	35
Bhopal.....	4,440	4,230	190	20	335	265	50	20
Chanda.....	6,600	6,350	230	20	475	395	60	20
Chirmuri.....	7,330	7,065	240	25	525	440	60	25
Dabhor-Poona.....	5,585	5,135	400	50	470	320	100	50
Jaipur-Kistna.....	3,835	3,520	260	55	340	220	65	55
Kanpur.....	4,860	4,680	150	30	360	290	40	30
Karur.....	5,235	5,000	220	15	380	310	55	15
Kolar.....	5,525	5,320	180	25	400	330	45	25
Ranchi.....	6,300	6,070	210	20	455	380	55	20
Warangol.....	7,385	7,020	330	35	555	440	80	35

- Entry represents zero.

Column 1. Sum of columns 2, 3, and 4.

Column 2. All EA's classified as rural.

Column 3. Urban places under 5,000 population.

Column 4. EA's outside the built-up area of urban places with population of 5,000 and over. Delineation of such EA's is based on judgment and knowledge of the area.

Column 5. Primary sampling units established for the 1971 Sample Census of Agriculture; roughly equivalent to EA's in the Population Census except that small EA's are combined and large EA's are subdivided.

Column 6. One-fourth of the total PSU's.

Column 7. Estimates based on the 1960 average number of persons per housing unit for Rajpur Province, 6.3 persons.

Column 8. One-fourth of the total housing units that are in the sample PSU's.

Column 9. Estimates of holdings in 1971 assume the same relationship between listings and holdings (about 88 percent) that was found in the 1961 Sample Census of Agriculture, with adjustment for difference in size of holdings out-of-scope for Rajpur Province.

Column 10. Holdings between 1/10 hectare and Local Certainty level.

Column 11. Holdings 200 to 499 hectares.

Column 12. Holdings of 500 hectares or more or having specialized agricultural operations.

Column 13. Sum of columns 14, 15, and 16; total number of A-1 questionnaires to be filled.

Column 14. One-sixteenth of the estimate in column 10 (one-fourth of the small holdings within the sample PSU's).

Column 15. One-fourth of the estimate in column 11 (all the Local Certainty holdings in the sample PSU's).

Column 16. Same as figure in column 12; all National Certainty holdings are to be enumerated.

[illegible]

Exhibit IV-5-4. ESTIMATED SAMPLE SIZE FOR THE NORTHERN TERRITORY

Population size group	Population, 1 May 1970 (preliminary count)			PSU's			PSU sampling rate	PSU's in sample	Popula- tion in sample PSU's	Housing units in sample PSU's (estimated number)
	Total for agricul- ture census	Rural	Urban	Total	Chief- doms and Special EA's	Urban				
	(1)	(2)	(3)	(4)	(5)	(6)				
Northern Territory....	407,279	395,101	12,178	1,969	1,952	17	(X)	101	46,485	8,460
Atbara River Basin.....	170,057	166,033	4,024	821	813	8	(X)	44	23,386	4,255
Less than 300.....	93,196	93,196	-	689	689	-	1 in 24	29	3,983	725
300 to 699.....	49,655	46,509	3,146	120	113	7	1 in 12	10	4,237	770
700 to 1,499.....	6,967	6,089	878	6	5	1	1 in 6	1	1,089	200
1,500 to 3,499.....	8,775	8,775	-	3	3	-	1 in 3	1	2,613	475
3,500 or more.....	11,464	11,464	-	3	3	-	all	3	11,464	2,085
Northwest.....	138,518	132,779	5,739	677	671	6	(X)	33	12,849	2,340
Less than 300.....	100,099	100,099	-	610	610	-	1 in 24	25	4,062	740
300 to 799.....	22,667	21,918	749	57	56	1	1 in 12	5	2,001	365
800 to 999.....	5,394	1,726	3,668	6	2	4	1 in 6	1	852	155
1,000 to 3,499.....	6,632	5,310	1,322	3	2	1	1 in 3	1	2,208	400
3,500 or more.....	3,726	3,726	-	1	1	-	all	1	3,726	680
Subic Mountains.....	98,704	96,289	2,415	471	468	3	(X)	24	10,250	1,865
Less than 300.....	73,258	73,258	-	430	430	-	1 in 24	18	3,056	555
300 to 499.....	10,891	10,423	468	31	30	1	1 in 12	3	1,066	195
500 to 1,299.....	4,565	2,618	1,947	6	4	2	1 in 6	1	743	135
1,300 to 3,000.....	6,296	6,296	-	3	3	-	1 in 3	1	1,691	310
3,000 or more.....	3,694	3,694	-	1	1	-	all	1	3,694	670
	All holdings in sample PSU's (estimated number)			Within PSU sampling rate	Overall sampling rate	Holdings in sample (estimated number)			Holdings in sample for area measurement	
	Total	Small	National Certainty			Total	Small	National Certainty		
	(11)	(12)	(13)			(14)	(15)	(16)		(17)
Northern Territory....	8,035	7,930	105	(X)	1 in 48	1,565	1,460	105	370	
Atbara River Basin.....	4,045	3,985	60	(X)	1 in 48	670	610	60	155	
Less than 300.....	690	680	10	1 in 2	1 in 48	350	340	10	85	
300 to 699.....	730	720	10	1 in 4	1 in 48	190	180	10	45	
700 to 1,499.....	190	175	15	1 in 8	1 in 48	35	20	15	5	
1,500 to 3,499.....	455	440	15	1 in 16	1 in 48	45	30	15	10	
3,500 or more.....	1,980	1,970	10	1 in 48	1 in 48	50	40	10	10	
Northwest.....	2,220	2,190	30	(X)	1 in 48	525	495	30	125	
Less than 300.....	705	700	5	1 in 2	1 in 48	355	350	5	90	
300 to 799.....	350	340	10	1 in 4	1 in 48	95	85	10	20	
800 to 999.....	145	140	5	1 in 8	1 in 48	25	20	5	5	
1,000 to 3,499.....	380	375	5	1 in 16	1 in 48	30	25	5	5	
3,500 or more.....	640	635	5	1 in 48	1 in 48	20	15	5	5	
Subic Mountains.....	1,770	1,755	15	(X)	1 in 48	370	355	15	90	
Less than 300.....	525	520	5	1 in 2	1 in 48	265	260	5	65	
300 to 499.....	185	185	-	1 in 4	1 in 48	45	45	-	10	
500 to 1,299.....	130	125	5	1 in 8	1 in 48	20	15	5	5	
1,300 to 3,000.....	295	290	5	1 in 16	1 in 48	25	20	5	5	
3,000 or more.....	635	635	-	1 in 48	1 in 48	15	15	-	5	

(X) Not applicable. - Entry represents zero.

Column 1. Sum of columns 2 and 3.

Column 2. All EA's classified as rural.

Column 3. All of the urban EA's in Cebu and Onbo cities and 8 rural-like EA's in Zanzi.

Column 4. Sum of columns 5 and 6.

Column 5. Primary sampling units established for the 1971 Sample Census of Agriculture; equivalent to chiefdoms and Special EA's in the Population Census.

Column 6. Primary sampling units established for the 1971 Sample Census of Agriculture; equivalent to urban EA's in the Population Census in Cebu and Onbo cities and the 8 rural-like EA's in Zanzi.

Column 7. Rate used to sample PSU's within each population group.

Column 8. Number of PSU's selected from each population size group.

Column 9. Total population in the selected PSU's.

Column 10. Estimates based on average of 5.5 persons per housing unit.

Column 11. Assumes that about 95 percent of the housing units are associated with a holding.

Column 12. Holdings of less than 500 hectares.

Column 13. Holdings of 500 hectares or more or having specialized agricultural operations.

Column 14. Rate used to select the small holdings to be enumerated.

Column 15. The overall sampling rate for the Agriculture Questionnaire; equivalent to column 7 X column 14.

Column 16. Sum of columns 17 and 18; total number of Agriculture Questionnaires to be filled.

Column 17. Sample of small holdings, applying the sampling rate in column 14 to the estimate in column 12.

Column 18. Same as figure in column 8; all National Certainty holdings are to be enumerated.

Column 19. One-fourth of the estimate in column 17; area will be reported, but not measured, for all National Certainty holdings.

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